

# An annotated checklist of the vascular plants of Taita Hills, Eastern Arc Mountain

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#### **Abstract**

Taita Hills forests are an ecological island within the Tsavo plains and are the northern-most part of the Eastern Arc Mountains in southeast Kenya. They are highly fragmented forests embedded in a mosaic of human settlements and farms on the slopes and hilltops. Despite their intensive degradation, they exhibit a high degree of plant diversity and endemism, and therefore are regarded as a biodiversity hotspot. In spite of their distinct importance to the biodiversity of the region as well as supporting the livelihoods of the surrounding communities, floristic studies in these hills have been finite. Through repetitive floral expeditions, herbarium records from the East African Herbarium (EA), Global Biodiversity Information (GBIF), and the Integrated Digitized Biocollections (iDigbio) databases, as well as plant lists from literature and monographs, we provide a comprehensive checklist of 1594 taxa representing 159 families, 709 genera, 1530 species, 39 subspecies, 27 varieties, and 2 hybrids. Out of these, 75 are endemic or near-endemic, 59 are exotic, and 83 are listed as either endangered or near endangered as evaluated in the IUCN Redlist. *Zehneria tuberifera* G.W.Hu & Q.F.Wang, a new species to science, which has previously been described, was also discovered from the Ngangao forest fragment. Information on the habit(s), habitat(s), and altitudinal range of each taxon is provided in this study. This checklist is an updated inventory of

the vascular plants of the Taita Hills. It confirms the high plant diversity of the hills and provides a clear baseline for strategic conservation and sustainable management of plant resources and diversity under the Convention on Biological Diversity (CBD).

#### **Keywords**

Biodiversity, checklist, conservation, Eastern arc mountains

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## Introduction

Global biodiversity loss has been widely attributed to forest loss and fragmentation, which are considered as its two principal factors (Newmark 1998; Brooks et al. 2002). Fragmentation oftentimes is superseded by over-exploitation, degradation, and introduction of exotic species, thus decreasing indigenous plant diversity (Newmark 1998;

Cordeiro and Howe 2001; Teucher et al. 2020). This ensuing biodiversity crisis has increased interest in conservation planning and prioritization strategies (Turner et al. 2007; Brooks 2010; Krupnick 2013; Habel et al. 2016; Ndang'ang'a et al. 2016; Conservation International 2021). Since the distribution and decline in species diversity are variable across the biomes, Myers (1988) proposed biodiversity hotspots for conservation prioritization (Mittermeier et al. 1998; Myers et al. 2000; Carrasco et al. 2020). The majority of hotspots are located in high densely populated areas and therefore are under high pressure due to demand for land and forest resources (Cincotta et al. 2000; Asongu and Jingwa 2012; Habel et al. 2016). The average population density within the hotspots has increased by 36% between the years 1995-2015 (Cunningham and Beazley 2018), and approximately two billion people live within the hotspots (CEPF 2021). Although a high human population does not directly guarantee habitat loss, the resulting human impact leads to it (Mittermeier et al. 2004; CEPF 2021). Twentytwo of the hotspots within the tropics are more affected, retaining a lesser proportion of their indigenous vegetation compared to those in temperate and subtropical zones (Hrdina and Romportl 2017).

Tropical montane cloud forests naturally have a small area of occupancy on moist ridge tops with a frequency of clouds (Lovett 1998a). These forests have been highlighted arguably as the world's most important tropical forests and diversity hotspots (Myers 1993; Lovett 1998a). Due to the isolation of these ecological islands, they have a high endemic species richness (Hamilton et al. 1995; Lovett 1998a, 1998b). The lower elevations of these ecosystems have been highly transformed mainly due to the conversion of forest to farmlands and, therefore, the forests serve as refugia for endangered species (Hamilton et al. 1995; Lovett 1998a). Cloud forests have low resilience to disturbance and their regeneration is fairly slow (Lovett 1998a). These forests provide a wide range of ecosystem services for millions of people living in the tropics. They are major watershed areas, providing timber, food, and medicinal plants for the local communities, acting as carbon sinks, and preventing denudation of hilltops through soil erosion (Myers 1993; Hamilton et al. 1995; Medley and Kalibo 2007).

The Eastern Arc Mountains (EAM) are part of the larger Eastern Afromontane Biodiversity Hotspot (EABH) which is ranked 9th in terms of hotspot importance (Hrdina and Romportl 2017). They are ancient crystalline mountains uplifted 30 million years ago stretching from the Taita Hills in Kenya to the Udzungwa Mountains in Tanzania (Burgess et al. 2007; Thijis et al. 2013). The EAM have been the center of numerous studies over the years delineating them as a key center of endemism (Beentje 1996; Lovett 1998b; Mittermeier et al. 1998; Myers et al. 2000; Gereau et al. 2005; Isango 2007; Linder 2014). Their unique flora has evolved gradually under environmental stability and thus their vegetation is fragile and susceptible to large-scale disturbances (Lovett 1998a). Previously under the Eastern Arc Mountains and Coastal Forests of Tanzania and Kenya Hotspot, they were considered highly likely to suffer most extinction events from a given loss of habitat (Brooks et al. 2002). It's estimated that 31% of the species in the EAM are extinct or in danger of extinction (Newmark 1998).

Taita Hills forests are one of the most endemic-rich montane forests of the Eastern Arc (Lovett 1998a), and the smallest in size, with only 6 km² of natural forests remaining, having lost 98% of their original forest cover (Newmark 1998; Burgess et al. 2007). 50% of the indigenous vegetation has been cleared in the last 60 years (Pellikka et al. 2013). Despite their small size and a high degree of fragmentation and degradation, these forests host a high diversity of both vascular and non-vascular plants, amphibians, reptiles and are also an Important Bird Area (IBA) (Beentje 1988; Bytebier 2001; Enroth et al. 2013, 2019; BirdLife International 2021).

Plant collection records in the Taita Hills span from as early as 1877 by a German botanist, Johan Maria Hildebrandt (Beentje 1998). Subsequently, other botanical explorations have been conducted, yielding substantial herbarium collections but lacking sufficient literature on the flora and vegetation (Beentje 1988). In 1985, a team of multidisciplinary experts carried an expedition in the Taita Hills courtesy of the National Museums of Kenya, focusing on the indigenous forest patches to ascertain their remaining size, status, and threats. They recorded 475 plant taxa representing 110 families and 283 genera, providing the first floral checklist of the indigenous fragmented forests (Beentje 1988). Ecological and ethnobotanical surveys carried out in Mt. Kasigau from 2002–2006 recorded 338 wild woody plants of economical and medicinal value to the local communities (Medley and Kalibo 2007). Finally, Thijis et al. (2013) published a field guide to the woody plant species of the Taita Hills indigenous relics recording 184 species and their uses.

Studies on the vegetational structure and health monitoring of these forests indicated that, between the years 1955–2004 forest cover within Taita Hills has reduced by 50% and the notable increase of 2% has been due to a growth in exotic plantations. In the heavily disturbed sites, selective logging has led to the dominance of secondary successive species and there is also an indication of a loss of endemic species within forest patches due to fragmentation (Wilder et al. 1998; Chege and Bytebier 2005; Maria 2007; Rodgers et al. 2008; Spanhove and Lehouck 2008; Pellikka et al. 2009, 2013; Omoro et al. 2010; Aerts et al. 2011; Medley and Maingi 2014). The woodland vegetation along the slopes has unique floristic affinities and is an important source of renewable natural resources for the local community. By meeting the community's needs, it helps in maintaining the evergreen forests for watershed protection (Rogo and Oguge 2000; Medley and Kalibo 2005; Himberg et al. 2009; Mwamidi et al. 2012; Medley et al. 2017). These hills exhibit a high biodiversity of both vascular and non-vascular plants (Enroth et al. 2013; 2019).

Floristic data for an area provides foundational tools for research, management, and policy making for the preservation, restoration, and use of biodiversity (Palmer et al. 1995). An unprecedented rate of extinction may exceed that of species recovery (Wheeler et al. 2012) and therefore prompting a crucial need for floristic inventories (Palmer et al. 1995). In Kenya, an updated flora checklist of several key areas of biodiversity importance such as Mount Elgon (Tweedie 1976), Shimba Hills (Luke 2005), Kakamega (Fischer et al. 2010), Mount Kenya (Zhou 2017), Cherengani Hills (Mbuni et al. 2019), Coastal forests of Kenya (Ngumbau et al. 2020), Aberdares Ranges Forest

(Kipkoech et al. 2020), and South and North Nandi forests (Girma et al. 2015; Melly et al. 2020) have been documented.

This study aims to provide a broader description of the updated vascular plants of Taita Hills through a comprehensive species inventory. Our objectives were to document the vascular plants occurring in the entire Taita Hills area, to determine the range restricted taxa as well as the species of conservation concern and record the different life forms and habitats within the Taita Hills. The checklist will assist policy-makers to make more informed decisions and appropriate strategies in the conservation and management of biodiversity in the area, especially for the range-restricted taxa. It also provides a basis for further botanical studies in Taita Hills.

## Materials and methods

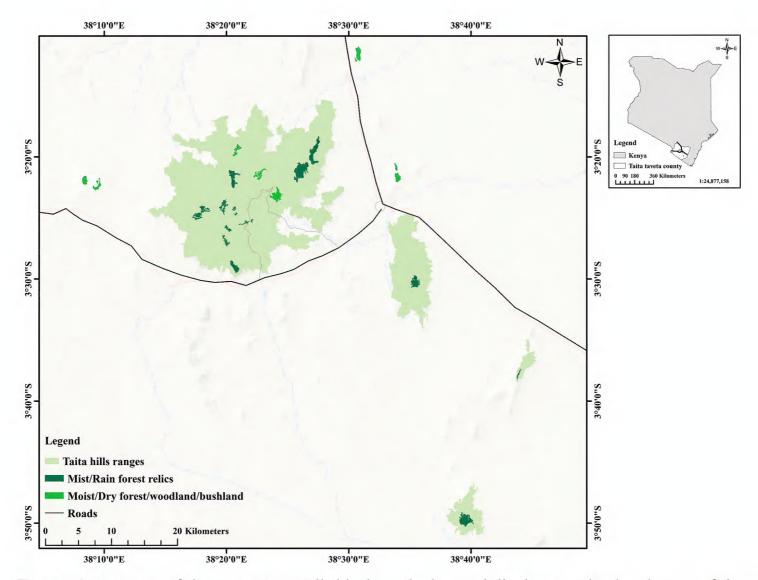
## Study area

The Taita Hills are located in the southeast part of Kenya within Taita Taveta county, forming the northernmost tip of the Eastern Arc Mountains. These ranges are divided into the Dabida, Mbololo, Sagala, and Kasigau massifs. Dabida and Mbololo are nearly intact, separated by a valley at 900 m a.s.l., while Sagala and Kasigau are isolated, 20 km and 50 km respectively, to the south (Pellikka et al. 2013; Medley and Maingi 2014). Adjacent to these main blocks are smaller hills, namely Maungu, Ndi, Maktau, and Mzinga, which have been included in this study (Fig. 1). This region lies between 38°08'E; 03°15'S and 38°45'E; 03°51'S, west of Voi town located along the Nairobi-Mombasa highway (A 109).

The elevation of the surrounding plains ranges from 480–700 m a.s.l. (Medley and Kalibo 2005; Medley et al. 2010), from which there are steep rises within short distances forming a series of ridges peaking at 2228 m a.s.l. on Vuria summit (Beentje 1988; Thijis et al. 2013). The steepness of the rocks is due to the hardness of a quartzite cap overlaying soft metamorphic rocks (Beentje 1988; Conte 2010).

# Forest fragments

The once intact montane forest on these hills has been reduced to 52 forest patches comprised of indigenous, mixed, and plantation forest vegetation (CEPF 2005). Administration of these forests is divided between two institutions, the Kenya Forest Service (KFS) overseeing 25 forest patches covering an area of 1310.41 ha, and the Taita Taveta County Council which oversees 24 forest patches (excluding Kitobo 160 ha, Salaita 40.5 ha, and Lotima 40.5 ha, which lie outside the scope of this study area) covering 7350.6 ha (CEPF 2005; Mwang'ombe 2005). Out of these, only 14 are indigenous relics varying greatly in size with the largest being Mbololo (220 ha) and the smallest Kituchenyi (<1 ha) (CEPF 2005; Thijis et al. 2013; Medley and Maingi 2014). Only three indigenous forests (Mbololo juu, Mwambirwa, and Ngangao) have been surveyed, leaving 11 forests lacking clear boundaries (Beentje 1988; CEPF 2005).



**Figure 1.** Location of the main Taita Hills blocks and adjacent hills showing the distribution of the forest patches.

## Climate

Due to their isolation, these hills form the first large barrier from the coastal strip trapping moisture-laden clouds. This moisture results in precipitation in the hilltop forests creating near permanent humid conditions all year round in areas with altitudes above 1400 m on the south-eastern slopes and 1700 m on the much drier north-western slopes (Pellikka et al. 2009). The climate of the area is under the influence of the Inter-Tropical Convergence Zone creating two distinct rainy seasons. Long rains occur from March to June while short rains are experienced from October to December. The annual average rainfall varies from 500 mm on the foothills to 1910 mm in the hills (Beentje 1988; Salminen 2004; CEPF 2005). The mean annual temperature ranges from 16–18 °C in the hills and as high as 24.6 °C in the lower zones (Omoro et al. 2013).

## Vegetation

Vegetation structure within the hills varies along the elevation gradient with the steep slopes providing very short transitional bands from one vegetational type to the other. Though there is a lack of continuous indigenous vegetative cover due to a matrix of forests, settlements, and farms, there are distinct changes in vegetation structure and phenology due to temperature and moisture variations (Medley and Kalibo 2007). In areas below ca. 650 m a.s.l., *Acacia-Commiphora* bushland vegetation forms a wildlife corridor in the plains between the Tsavo East and Tsavo West national parks around and on the foothills (Medley et al. 2017). Along the slopes, forest fragments and deciduous/evergreen montane woodland vegetation are nested within an agricultural rural landscape (Newmark 1998).

In the much drier north-western slopes, vegetation mostly comprises *Euphorbia ingens* E.Mey. ex Boiss. and *Euphorbia bussei* var. *kibweziensis* (N.E.Br.) S.Carter (Pellikka et al. 2013). On the hilltops, lies the isolated evergreen forest described as upland mist forest (Beentje 1988), Afromontane rainforest (Bytebier 2001; Aerts et al. 2011), or cloud forests (Pellikka et al. 2009; Medley and Maingi 2014). The potential natural vegetation community here is *Ocotea-Podocarpus*. However, these two species have undergone intensive selective harvesting and only a small number of mature individuals remain (Bytebier 2001).

Disturbance indicator species such as Tabernaemontana stapfiana Britten, Albizia gummifera (J.F.Gmel.) C.A.Sm., Maesa lanceolata Forssk., and Phoenix reclinata Jacq., are more common in these forest patches (Chege and Bytebier 2005; Omoro and Luukkanen 2011). Canopy species include Aningeria adolfi-friedericii (Engl.) Robyns & Gilbert, Albizia gummifera, Polyscias fulva (Hiern) Harms, Ocotea sp., Macaranga conglomerata Brenan, and Newtonia buchanannii (Baker) G.C.C.Gilbert & Boutique while understory species include Psychotria sp., Dracaena steudneri Engl., Rytigynia uhligii (K.Schum. & K.Krause) Verdc., Strombosia scheffleri Engl., Pauridiantha paucinervis (Hiern) Bremek. (Chege and Bytebier 2005; Thijis et al. 2013). Plantation forests of Pinus patula Schiede ex Schltdl. & Cham., Hesperocyparis lusitanica (Mill.) Bartel, Eucalyptus saligna Sm, and Juniperus sp. exist within some of the indigenous fragments and in areas where denuded hilltops were reforested with exotic tree species (Beentje 1988; Omoro et al. 2013). Common invasive species found within Taita Hills include Maesopsis eminii Engl., Cinnamomum camphora (L.) J. Presl, Lantana camara L., Biancae decapetala (Roth) O.Deg., and Acacia mearnsii De Wild. (Spanhove and Lehouck 2008).

#### Land use

Increased demand for fertile land in the area due to a rise in human population over the past 250 years has led to the conversion of indigenous forests to agricultural land (Jaetzold et al. 2010; CEPF 2005). The bulk of farmlands are located in areas that have high agricultural potential or are forested between 800–1700 m (Bytebier 2001), with some farms extending to as low as 480 m in Kasigau (Medley and Kalibo 2005). The main cultivated crops are coffee, mangoes, cassava, banana, maize, and beans (Beentje 1988; Jaetzold et al. 2010). As a means to safeguard against crop failure due to changes in weather patterns, families own farmlands at different elevations and thus leading to more forest loss and fragmentation (Bytebier 2001; Madoffe et al. 2005).

## Floristic survey, plant collection and nomenclature

Several field expeditions were carried out between the years 2015 and 2019 by the Sino-Africa Joint Research Center (SAJOREC) and Flora of Kenya Project (FOKP). The various forest fragments were surveyed in both the wet and dry seasons with an effort put to expand geographical coverage to areas where previous collections had been scarce. General walk-over surveys were carried out targeting fertile plant species which were thereafter photographed, tagged, and collected. The species habit, habitat, elevation, location, and collector's details were recorded. The specimens were then pressed, dried, and deposited at the East African herbarium (EA) with duplicates deposited at the Hubei Institute of Botany herbarium (HIB). Identification of collected specimens was done using existing floral monographs (FTEA 1952–2012; Beentje 1994; Agnew 2013), as well as comparing collections with identified specimens in the EA.

Previous collections recorded from the Taita Hills were collated to supplement records from the field surveys. These were obtained from specimens in the EA, monographs, and published literature (FTEA 1952–2012; Beentje 1988, 1994; Medley and Kalibo 2007; Thijis et al. 2013), Global Biodiversity Information Facility (GBIF 2021) (http://www.gbif.org) and the Integrated Digitized Biocollections (iDigBio 2021) (http://www.idigbio.org).

The conservation status of all vascular plants recorded was determined using the International Union for Conservation of Nature criterion (IUCN 2021) (https://www.iucnredlist.org). Existing range-restricted taxa were determined by searching all recorded species in the GBIF occurrence database (www.gbif.org), IUCN Red List (IUCN 2021) (https://www.iucnredlist.org) and the Flora of Tropical East Africa (FTEA 1952–2012). The current taxonomic circumscription, as well as the authorities for each taxon were determined through the Plants of the World Online (POWO 2019) (http://www.plantsoftheworldonline.org), African Plant Database (http://africanplantdatabase.ch) (African Plant Database 2021), Tropicos (http://www.tropicos.org) (Tropicos 2021) and the Catalogue of Life (Roskov et al. 2021) (http://www.catalogueoflife.org).

#### Results

# Species diversity

We recorded 1594 taxa (1530 species, 39 subspecies, 27 varieties, and two hybrids) representing 709 genera and 159 families of vascular plants within the Taita Hills. These constitute 60.89%, 42.78%, and 23.41% of all indigenous families, genera and species, and 35.48%, 16.89%, and 10.03% of all exotic families, genera and species represented in the flora of Kenya respectively (FTEA 1952–2012). Eighty-three, 17, 58 and 59 taxa represent threatened, endemic, near-endemic and exotic species in Taita Hills respectively. Diversity within the classes in sequence from the most to the least diverse was Magnoliopsida (75.91%), Liliopsida (14.95%), Polypodiopsida (8.22%), Lycopodiopsida (0.65%), Pinopsida (0.2%), and Cycadopsida (0.07%) (Fig. 2).

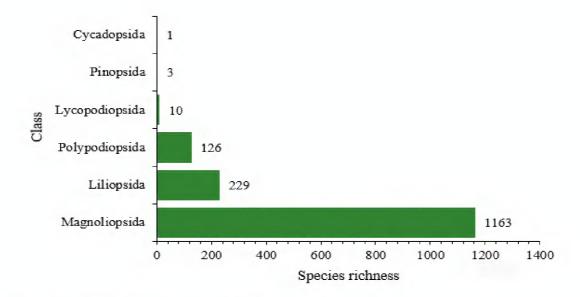
The most speciose families are Fabaceae, 133 taxa (125 species), Rubiaceae, 88 (75), Asteraceae, 78 (77), and, Orchidaceae, 70 (69). Genera with 15 or more species include *Euphorbia* (Euphorbiaceae), *Asplenium* (Aspleniaceae), *Cyperus* (Cyperaceae), *Coleus* (Lamiaceae) and, *Ceropegia* (Apocynaceae) (Table 1).

## Plant growth forms

The growth habit(s) of each species was recorded using a simple classification into six categories: trees, shrubs, lianas, subshrubs, climbers and herbs. Species that express variations in their growth habit are recorded in two or more categories. Herbs represented the highest percentage of life forms with 711 taxa (573 terrestrial and 138 epiphytic), followed by shrubs with 391 taxa, trees with 369 taxa, climbers with 123 taxa, subshrubs with 101 taxa, and lianas with 74 taxa. (Fig. 3).

## Plant species global conservation status

According to the IUCN Red List of Threatened Species (IUCN 2021), a total of 484 of the plants found in Taita Hills were evaluated. Of these taxa, 63 are threatened while



**Figure 2.** The classes of vascular plant species in Taita Hills.

**Table 1.** The largest families and genera of vascular plants in Taita Hills.

Family	Genera	Species	Genus	Species
Fabaceae	55	125	Euphorbia L. (Euphorbiaceae)	34
Asteraceae	46	77	Asplenium L. (Aspleniaceae)	31
Rubiaceae	41	75	Cyperus L. (Cyperaceae)	30
Orchidaceae	28	69	Coleus Lour. (Lamiaceae)	21
Apocynaceae	34	64	Ceropegia L. (Apocynaceae)	15
Malvaceae	21	58	Commiphora Jacq. (Burseraceae)	15
Euphorbiaceae	13	55	Crotalaria L. (Fabaceae)	15
Lamiaceae	20	50	Solanum L. (Solanaceae)	15
Poaceae	25	47	Ipomoea L. (Convolvulaceae)	14
Aspleniaceae	44	44	Ficus Tourn. ex L. (Moraceae)	14
Cyperaceae	9	42	Polystachya Hook. (Orchidaceae)	13

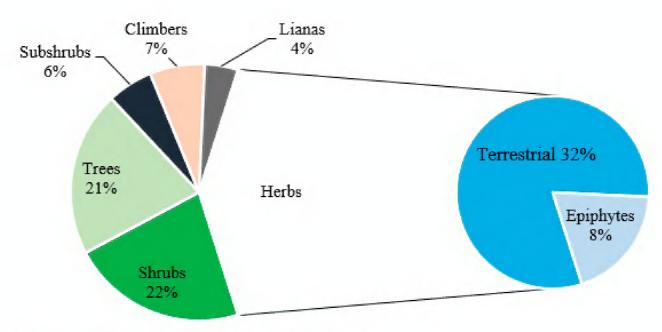


Figure 3. Growth form of vascular plants in Taita Hills.

20 are near threatened. Two taxa are recorded as Critically Endangered (CR), 27 as Endangered (EN), 34 as Vulnerable (VU), 20 as Near Threatened (NT), 399 as of Least Concern (LC) and two taxa as Data Deficient (DD) (Table 2, 3). The families with the most numbers of species in need of conservation concern are Rubiaceae (17 taxa), Orchidaceae (eight taxa) and Euphorbiaceae (six taxa). In terms of life forms, trees were the highest in number forming 35% of the total. They were followed by herbs 32%, shrubs 29%, subshrubs 2%, climbers and lianas 1% each (Table 7).

## Endemic and near-endemic species

Species with a geographic restricted range are treated in this checklist as either strict endemics (i.e. occurring only within Taita Hills forests) or as near endemics which are further subdivided into:

- i. Eastern Arc endemics Those taxa whose geographical scope of occurrence is limited to the Eastern Arc Mountain ranges.
- ii. Taita-Taveta District endemics Those taxa restricted to Taita Taveta district within the study area but not within the forest fragments.
- iii. Regional Endemics Those taxa that are extant in 10 or fewer locations, or are threatened and in decline according to the IUCN, or cover a small area of occupancy (<10, 000 km²) such that the population size in Taita Hills is significant for the survival of the species (Darbyshire et al. 2019).

This checklist contains 17 strict endemics and 58 near endemics (Fig. 4) (Tables 4, 5). These are distributed in 32 families and 55 genera. They represent 4.9% of the total species recorded in this area. The taxa-rich families are Rubiaceae (12 taxa), Orchidaceae (seven taxa), Euphorbiaceae, Apocynaceae (six taxa each) and Fabaceae (five taxa). In terms of life forms, herbs formed the bulk being 37% of the total, followed by shrubs 26%, trees 24%, climbers 8%, lianas 3% and subshrubs 2% (Table 7).

**Table 2.** Number of plant taxa and their proportion in each IUCN category.

IUCN Category	No. of taxa	Percentage
Critically Endangered (CR)	2	0.13%
Endangered (EN)	27	1.70%
Vulnerable (VU)	34	2.13%
Near Threatened (NT)	20	1.25%
Least Concern (LC)	399	25.03%
Data Deficient (DD)	2	0.13%
Not Evaluated (N/A)	1110	69.63%
Total	1594	100%

**Table 3.** List of threatened and near-threatened plant taxa found in Taita Hills, their IUCN category and current status.

Family	Species	Life form	Category	Status	Version
Acanthaceae	Crossandra friesiorum Mildbr.	Herb	VU	Decreasing	3.1
Acanthaceae	Dyschoriste keniensis subsp. glandulifera Malombe, Mwachala & Vollesen	Subshrub	VU	Decreasing	3.1
Acanthaceae	Isoglossa candelabrum Lindau	Shrub	EN	Unknown	3.1
Acanthaceae	<i>Justicia galeata</i> Hedrén	Shrub	VU	Decreasing	3.1
Acanthaceae	Neuracanthus tephrophyllus subsp. tsavoensis Bidgood & Brummitt	Subshrub	EN	Decreasing	3.1
Araliaceae	Astropanax myrianthus (Baker) Lowry, G.M.Plunkett & al.	Liana/Tree	NT	Decreasing	3.1
Araliaceae	Polyscias stuhlmannii Harms	Tree	EN	Unknown	3.1
Asphodelaceae	Aloe ballyi Reynolds	Tree	EN	Decreasing	3.1
Asphodelaceae	Aloe classenii Reynolds	Herb	CR	Decreasing	3.1
Asphodelaceae	Aloe deserti A.Berger	Shrub	NT	Unknown	3.1
Asphodelaceae	Aloe penduliflora Baker	Shrub	EN	Unknown	3.1
Asphodelaceae	Aloe volkensii Engl. subsp. volkensii	Shrub	NT	Decreasing	3.1
Asteraceae	Bothriocline glomerata (O.Hoffm. & Muschl.) C.Jeffrey	Shrub	EN	Unknown	3.1
Asteraceae	Brachylaena huillensis O.Hoffm.	Shrub/Tree	NT	Unspecified	2.3
Asteraceae	Solanecio mirabilis (Muschl.) C.Jeffrey	Herb	EN	Decreasing	3.1
Aspleniaceae	Thelypteris usambarensis (Holttum) Christenh.	Herb	EN	Unknown	3.1
Burmanniaceae	Gymnosiphon usambaricus Engl.	Herb	EN	Unknown	3.1
Burseraceae	Commiphora campestris Engl.	Tree	NT	Unknown	2.3
Burseraceae	Commiphora oblongifolia J.B.Gillett	Shrub/Tree	NT	Unknown	3.1
Cucurbitaceae	Gerrardanthus grandiflorus Gilg ex Cogn.	Climber	NT	Decreasing	3.1
Cyperaceae	Bulbostylis hispidula subsp. halophila (Lye) R.W.Haines	Herb	EN	Unknown	3.1
Cyperaceae	Cyperus purpureoviridis Lye	Herb	NT	Stable	3.1
Dennstaedtia- ceae	Blotiella hieronymi (Kümmerle) Pic. Serm.	Herb	EN	Unknown	3.1
Euphorbiaceae	Euphorbia bussei Pax var. bussei	Shrub	EN	Unknown	3.1
Euphorbiaceae	Euphorbia furcata N.E.Br.	Herb	VU	Unknown	3.1
Euphorbiaceae	Euphorbia petricola P.R.O.Bally & S.Carter	Herb	EN	Unknown	3.1
Euphorbiaceae	Euphorbia tenuispinosa Gilli var. tenuispinosa	Herb	VU	Unknown	3.1
Euphorbiaceae	Macaranga conglomerata Brenan	Tree	VU	Decreasing	3.1
Euphorbiaceae	Milbraedia carpinifolia (Pax) Hutch. var. carpinifolia	Shrub	VU	Unspecified	2.3
Fabaceae	Craibia brevicaudata (Vatke) Dunn	Tree	NT	Unspecified	
Fabaceae	Crotalaria ukambensis Vatke	Herb	EN	Unknown	3.1
Fabaceae	Dalbergia melanoxylon Guill. & Perr.	Shrub/Tree	NT	Unspecified	2.3
Fabaceae	Millettia oblata subsp. teitensis J.B.Gillett	Tree	VU	Unspecified	

Family	Species	Life form	Category		Version
Gesneriaceae	Streptocarpus teitensis (B.L.Burtt) Christenh.	Herb	CR	Decreasing	3.1
Gesneriaceae	Streptocarpus montanus Oliv.	Herb	NT	Unknown	3.1
Iridaceae	Gladiolus usambarensis Marais ex Goldblatt	Herb	NT	Unknown	3.1
Lamiaceae	Coleus triangularis (A.J.Paton) A.J.Paton	Herb	NT	Decreasing	3.1
Lamiaceae	Vitex fischeri var. keniensis (Turrill) Meerts	Tree	EN	Decreasing	3.1
Lauraceae	Ocotea kenyensis (Chiov.) Robyns & R.Wilczek	Tree	VU	Unspecified	2.3
Loranthaceae	Englerina drummondii Balle ex Polhill & Wiens	Herb	VU	Decreasing	3.1
Lycopodiaceae	Huperzia holstii (Hieron.) Pic.Serm.	Herb	NT	Unknown	3.1
Malvaceae	Hibiscus greenwayi Baker f.	Shrub	VU	Unknown	3.1
Melastomataceae	Memecylon teitense Wickens	Tree	VU	Unknown	3.1
Moraceae	Dorstenia goetzei Engl.	Herb	NT	Decreasing	3.1
Moraceae	Dorstenia warneckei Engl.	Herb	NT	Decreasing	3.1
Moraceae	Milicia excelsa (Welw.) C.C.Berg	Tree	NT	Unspecified	2.3
Myrtaceae	Eucalyptus camaldulensis Dehnh.	Tree	NT	Stable	3.1
Myrtaceae	Syzygium micklethwaitii Verdc.	Tree	VU	Decreasing	3.1
Myrtaceae	Syzygium subcordatum (Verdc.) Byng &N.Snow	Tree	VU	Decreasing	3.1
Nymphaeaceae	Nymphaea nouchali var. caerulea (Savigny) Verdc.	Herb	EN	Decreasing	3.1
Ochnaceae	Campylospermum scheffleri (Engl. & Gilg) Farron	Tree	VU	Unspecified	2.3
Orchidaceae	Ansellia africana Lindl.	Herb	VU	Decreasing	3.1
Orchidaceae	Cynorkis buchwaldiana subsp. braunii (Kraenzl.)	Herb	NT	Decreasing	3.1
Oremdaceae	Summerh.	11010	141	Decreasing	5.1
Orchidaceae	Cynorkis uncata (Rolfe) Kraenzl.	Herb	VU	Unknown	3.1
Orchidaceae		Herb	VU	Unknown	3.1
Oremdaceae	Polystachya caespitifica subsp. latilabris (Summerh.) P.J Cribb & Podz.	пего	VO	Unknown	3,1
Orchidaceae	Polystachya disiformis P.J. Cribb	Herb	EN	Unknown	3.1
Orchidaceae	Polystachya teitensis P.J.Cribb	Herb	EN	Unknown	3.1
Orchidaceae	Tridactyle cruciformis Summerh.	Herb	EN	Unknown	3.1
Orchidaceae	Ypsilopus tanneri (P.J.Cribb) D'haijère & Stévart	Herb	EN	Unknown	3.1
Phyllanthaceae	Meineckia ovata (E.A.Bruce) J.F.Brunel ex Radcl Sm.	Shrub	VU	Unspecified	2.3
Podocarpaceae	Afrocarpus usambarensis (Pilg.) C.N.Page	Tree	EN	Decreasing	3.1
Rosaceae	Prunus africana (Hook.f.) Kalkman	Tree	VU	Unspecified	2.3
Rubiaceae	Canthium oligocarpum subsp. intermedium Bridson	Shrub/Tree		Unspecified	2.3
Rubiaceae	Coffea fadenii Bridson	Tree	EN	Unknown	3.1
Rubiaceae	Coffea zanguebariae Lour.	Shrub	VU	Unknown	3.1
Rubiaceae	Empogona ovalifolia var. glabrata (Oliv.) Tosh & Robbr.	Shrub	VU	Unspecified	2.3
Rubiaceae	Empogona ovalifolia var. taylorii (S.Moore) Tosh & Robbr.	Shrub	VU	Unspecified	2.3
Rubiaceae	Oxyanthus pyriformis subsp. brevitubus Bridson	Shrub/Tree	VU	Unspecified	2.3
Rubiaceae	Oxyanthus pyriformis subsp. longitubus Bridson	Shrub/Tree		Unspecified	2.3
Rubiaceae	Pavetta sepium K.Schum. var. sepium	Shrub	VU	Unspecified	2.3
Rubiaceae	Pavetta teitana K.Schum.	Shrub	VU	Decreasing	3.1
Rubiaceae		Shrub	VU	_	2.3
	Psychotria alsophila K.Schum.			Unspecified	
Rubiaceae	Psychotria crassipetala E.M.A. Petit	Tree	EN	Decreasing	3.1
Rubiaceae	Psychotria cyathicalyx E.M.A.Petit	Tree	VU	Unspecified	2.3
Rubiaceae	Psychotria pseudoplatyphylla E.M.A.Petit	Shrub	VU	Unspecified	2.3
Rubiaceae	Psychotria petitii Verdc.	Tree	EN	Decreasing	3.1
Rubiaceae	Psychotria pseudoplatyphylla E.M.A.Petit	Shrub	VU	Unspecified	2.3
Rubiaceae	Psychotria taitensis Verdc.	Tree	EN	Unknown	3.1
Rubiaceae	Psydrax polhillii Bridson	Shrub	VU	Decreasing	3.1
Rubiaceae	Rytigynia eickii (K.Schum. & K.Krause) Bullock	Shrub	VU	Unspecified	2.3
Rutaceae	Vepris fadenii (Kokwaro) Mziray	Tree	VU	Decreasing	3.1
Salicaceae	Bivinia jalbertii Tul.	Tree	NT	Unspecified	2.3
Zamiaceae	Encephalartos kisambo Faden & Beentje	Tree	EN	Decreasing	3.1



**Figure 4.** Some Taita Hills endemic and near endemic plant species **A** Chassalia discolor subsp. taitensis **B-C** Impatiens teitensis Grey-Wilson subsp. teitensis **D** Meineckia ovata **E** Impatiens engleri subsp. pubescens **F** Memecylon teitense **G** Streptocarpus teitensis.

**Table 4.** Number of endemic and near-endemic species found in the Taita Hills.

Region	Number of species
Taita relicts	17
Eastern Arc Mountains (Excluding Taita Hills)	30
Taita district	2
Regional Endemics	26
Total	75

**Table 5.** Endemic and near-endemic plants of Taita Hills.

Family	Species	Life form	Distribution
Acanthaceae	Dyschoriste keniensis subsp. glandulifera Malombe, Mwachala & Vollesen	Subshrub	K7, T2, 3
Acanthaceae	Isoglossa candelabrum Lindau	Shrub	EAM
Apocynaceae	Ceropegia distincta var. rostrata Masinde	Climber	Taita District
Apocynaceae	Ceropegia konasita Masinde	Climber	K7
Apocynaceae	Ceropegia verticillata Masinde	Climber	Mbololo
Apocynaceae	Huernia andreaeana (Rauh) L.C.Leach	Herb	K7
Apocynaceae	Orbea taitica Bruyns	Herb	K4, 7
Apocynaceae	Tylophora sp. B of FTEA	Climber	Ngangao
Asphodelaceae	Aloe classenii Reynolds	Herb	K7
Asphodelaceae	Aloe penduliflora Baker	Shrub	K7
Asteraceae	Bothriocline glomerata (O.Hoffm. & Muschl.) C.Jeffrey	Shrub	K4, 7, T3
Asteraceae	Solanecio buchwaldii (O.Hoffm.) C.Jeffrey	Shrub	EAM
Balsaminaceae	Impatiens engleri subsp. pubescens Grey-Wilson	Herb	Ngangao
Balsaminaceae	Impatiens teitensis Grey-Wilson	Herb	Taita Hills
Burmanniaceae	Gymnosiphon usambaricus Engl.	Herb	EAM
Cucurbitaceae	Gerrardanthus grandiflorus Cogn.	Climber	K7, T3
Cucurbitaceae	Zehneria tuberifera G.W.Hu & Q.F.Wang	Climber	Ngangao
Cyperaceae	Cyperus scott-elliotii Govaerts	Herb	Taita District
Dennstaedtiaceae	Blotiella hieronymi (Kümmerle) Pic.Serm.	Herb	EAM
Dichapetalaceae	Dichapetalum eickii Ruhland	Shrub/Liana	EAM

Family	Species	Life form	Distribution
Euphorbiaceae	Euphorbia classenii P.R.O.Bally & S.Carter	Shrub	Kasigau
Euphorbiaceae	Euphorbia furcata N.E.Br.	Herb	K7, T2, 3
Euphorbiaceae	Euphorbia neoglaucescens Bruyns	Shrub/Tree	K7, T3, 5, 6
Euphorbiaceae	Euphorbia petricola P.R.O.Bally & S.Carter	Herb	K7
Euphorbiaceae	Jatropha velutina Pax & K.Hoffm.	Subshrub	K7
Euphorbiaceae	Macaranga conglomerata Brenan	Tree	EAM
Fabaceae	Crotalaria lukwangulensis Harms	Shrub/Liana	EAM
Fabaceae	Cynometra sp. A of FTEA	Tree	EAM
Fabaceae	Millettia oblata Dunn subsp. burttii J.B.Gillett	Shrub/Tree	K7, T5
Fabaceae	Millettia oblata subsp. teitensis J.B.Gillett	Tree	EAM
Gesneriaceae	Streptocarpus kirkii Hook.f.	Herb	EAM
Gesneriaceae	Streptocarpus saxorum Engl.	Herb	EAM
Gesneriaceae	Streptocarpus teitensis (B.L.Burtt) Christenh.	Herb	Mbololo
Hymenophyl-	Hymenophyllum sp. A of FTEA	Herb	EAM
laceae	12 y menop ny mmn op 11 o 11 1 = 1	11010	
Iridaceae	Gladiolus rupicola Vaupel	Herb	EAM
Iridaceae Iridaceae	Gladiolus usambarensis Marais ex Goldblatt	Herb	K7, T2, 3, 6
Lamiaceae Lamiaceae	Coleus triangularis (A.J.Paton) A.J.Paton	Herb	EAM
		Herb	EAM
Lamiaceae Linderniaceae	<i>Leucas oligocephala</i> var. <i>usambarica</i> Sebald <i>Linderniella brevidens</i> (Skan) Eb.Fisch., Schäferh. & Kai Müll.	Herb Herb	EAM EAM
Malphigiaceae	Acridocarpus taitensis Mwadime, Ngumbau & Q.Luke	Liana	Ngangao
Malvaceae	Abutilon mauritianum var. grandiflorum Verdc.	Shrub	EAM
Melastomataceae	Memecylon greenwayi Brenan	Tree	EAM
Melastomataceae	Memecylon teitense Wickens	Shrub/Tree	Ngangao/Mbo- lolo
Moraceae	Dorstenia christenhuszii M.W.Chase & M.F.Fay	Herb	Mbololo
Moraceae	Dorstenia warneckei Engl.	Herb	K7, T3, 6
Myrtaceae	Syzygium micklethwaitii Verdc.	Tree	K7, T2, 3, 6
Myrtaceae	Syzygium subcordatum (Verdc.) Byng & N.Snow	Tree	EAM
Ochnaceae	Campylospermum scheffleri (Engl. & Gilg) Farron	Tree	EAM
Orchidaceae	Cynorkis buchwaldiana subsp. braunii (Kraenzl.) Summerh.	Herb	EAM
Orchidaceae	Cynorkis uncata (Rolfe) Kraenzl.	Herb	EAM
Orchidaceae	Microcoelia smithii (Rolfe) Summerh.	Herb	K7, T3, 6
Orchidaceae	Polystachya teitensis P.J.Cribb	Herb	Maungu/Kasigau
Orchidaceae	Rhipidoglossum leedalii (P.J.Cribb) Farminhão & Stévart	Herb	EAM
Orchidaceae	Tridactyle cruciformis Summerh.	Herb	K6, 7, T3
Orchidaceae	Ypsilopus tanneri (P.J.Cribb) D'haijère & Stévart	Herb	EAM
Orobanchaceae	Harveya kenyensis Hepper	Herb	K7, 4
Phyllanthaceae	Meineckia ovata (E.A.Bruce) J.F. Brunel ex RadclSm.	Shrub	
Phyllanthaceae Phyllanthaceae	Phyllanthus mittenianus Hutch.	Shrub	Ngangao K7
Rubiaceae		Shrub	Taita Hills
Rubiaceae	Chassalia discolor subsp. taitensis Verdc.	Tree	EAM
	Coffee fadenii Bridson		
Rubiaceae	Galium brenanii Ehrend. & Verdc.	Herb	K7, T2, 3, 6
Rubiaceae	Oxyanthus pyriformis subsp. longitubus Bridson	Shrub/Tree	K7
Rubiaceae	Parapentas battiscombei Verdc.	Herb	Ngangao, K4
Rubiaceae	Psychotria alsophila K.Schum.	Shrub/Tree	Ngangao, T2, 3
Rubiaceae	Psychotria crassipetala E.M.A.Petit	Shrub/Tree	K7
Rubiaceae	<i>Psychotria petitii</i> Verdc.	Shrub/Tree	Ngangao/Mbo- lolo
Rubiaceae	Psychotria pseudoplatyphylla E.M.A.Petit	Shrub/Tree	Taita, T2, 3
Rubiaceae	Psychotria sp. B of FTEA	Shrub	Ngangao
Rubiaceae	Psychotria taitensis Verdc.	Tree	Kasigau
Rubiaceae	Rytigynia eickii (K.Schum. & K.Krause) Bullock	Shrub/Tree	EAM
Rutaceae	Vepris fadenii (Kokwaro) Mziray	Shrub/Tree	Taita Hills
Thelypteridaceae	Thelypteris usambarensis (Holttum) Christenh.	Herb	EAM
Thymelaeaceae	Dicranolepis usambarica Gilg	Shrub/Tree	EAM
Vitaceae	Cyphostemma braunii (Gilg & M.Brandt) Desc.	Climber	EAM
Zamiaceae	Encephalartos kisambo Faden & Beentje	Tree	EAM

Endemic species that were recorded in Taita Hills were unevenly distributed among the forests within the remnant hills. Ngangao forest fragment, which is the second largest in size recorded the largest number of endemics (12 species), followed by Mbololo (nine species), Kasigau (four species) and Chawia (two species) respectively. The rest of the mist forest fragments each had one listed endemic from their fragment.

## New records

In the course of the field investigations, a new species, *Zehneria tuberifera* G.W.Hu & Q.F.Wang (Cucurbitaceae), was discovered from the Ngangao fragment (Watuma et al. 2019). Subsequently, we also collected a new record, *Momordica calantha* Gilg. (Cucurbitaceae), from the Wesu fragment (Watuma 2021). This species had previously been recorded from Uganda, Tanzania and the central highlands of Kenya. A recent study has also reported a new species from Ngangao fragment *Acridocarpus taitensis* Mwadime, Ngumbau & Q.Luke (Previously *Acridocarpus* sp. A of KTSL) (Malphigiaceae) (Nyange et al. 2020) (Fig. 5).

## **Exotic species**

Exotic species recorded were categorized as either cultivated, introduced, or naturalized according to the African Plant Database and Plants of the World Online. In this study, a total of 59 exotic vascular plant taxa were recorded (Table 6). This makes up 3.85% of the total species recorded from the Taita Hills, which represents 51 genera and 22 families. The most speciose families are Asteraceae, Fabaceae (eight species



**Figure 5.** Photographs of new plant species recorded from Taita Hills **A** Acridocarpus taitensis **B** Momordica calantha **C** Zehneria tuberifera.

**Table 6.** List of exotic plant species recorded in Taita Hills.

Family	Species	Habit	Status
Amaranthaceae	Alternanthera pungens Kunth	Herb	Introduced
Amaranthaceae	Alternanthera sessilis (L.) R.Br. ex DC.	Herb	Imtroduced
Amaranthaceae	Amaranthus graecizans subsp. thellungianus (Nevski) Gusev	Herb	Introduced
Amaranthaceae	Amaranthus hybridus L. subsp. Hybridus	Herb	Introduced
Amaranthaceae	Gomphrena celosioides Mart.	Herb	Naturalized-Introduced
Amaranthaceae	Guilleminea densa (Willd. ex Schult.) Moq.	Herb	Introduced
Annonaceae	Annona cherimola Mill.	Shrub	Cultivated
Apiaceae	Cyclospermum leptophyllum (Pers.) Sprague ex Britton & P.Wilson	Herb	Naturalized-Introduced
Apocynaceae	Calotropis gigantea (L.) W.T.Aiton	Shrub	Naturalized-Introduced
Apocynaceae	Catharanthus roseus (L.) G.Don	Tree	Cultivated-Naturalized
Apocynaceae	Gomphocarpus physocarpus E.Mey.	Herb	Introduced
Asteraceae	Acmella uliginosa (Sw.) Cass.	Herb	Introduced
Asteraceae	Erigeron karvinskianus DC.	Herb	Naturalized-Introduced
Asteraceae	Flaveria trinervia (Spreng.) C.Mohr	Herb	Naturalized-Introduced
Asteraceae	Galinsoga parviflora Cav.	Herb	Naturalized-Introduced
Asteraceae	Senecio vulgaris L.	Herb	Introduced
Asteraceae	Tagetes minuta L.	Herb	Naturalized-Introduced
Asteraceae	Tithonia diversifolia (Hemsl.) A.Gray	Subshrub	Naturalized-Introduced
Asteraceae	Tridax procumbens L.	Herb	Naturalized-Introduced
Brassicaceae	Brassica rapa L.	Herb	Naturalized-Introduced
Brassicaceae	Lepidium bonariense L.	Herb	Naturalized-Introduced
Cactaceae	Opuntia humifusa (Raf.) Raf.	Shrub	Introduced
Crassulaceae	Kalanchoe miniata Hilsenb. & Bojer ex Tul.	Herb	Cultivated
Cupressaceae	Callitris preissii Miq.	Tree	Introduced-Cultivated
•	*	Herb	Naturalized-Introduced
Euphorbiaceae	Euphorbia serpens Kunth	Shrub/Tree	Naturalized-Introduced Naturalized-Introduced
Euphorbiaceae	Jatropha curcas L.		Naturalized-Introduced Naturalized-Cultivated
Euphorbiaceae	Ricinus communis L.	Herb	
Fabaceae	Acacia mearnsii De Wild.	Tree	Naturalized-Introduced
Fabaceae	Acacia melanoxylon R.Br.	Tree	Naturalized-Introduced
Fabaceae	Biancaeae decapetala (Roth) O.Deg.	Shrub	Cultivated
Fabaceae	Calliandra houstoniana (Mill.) Standl.	Shrub	Naturalized-Introduced
Fabaceae	Indigofera tinctoria L. var. tinctoria	Subshrub	Introduced
Fabaceae	Leucaena leucocephala (Lam.) de Wit	Tree	Cultivated
Fabaceae	Senna bicapsularis (L.) Roxb.	Shrub	Introduced
Fabaceae	Senna occidentalis (L.) Link	Subshrub	Naturalized-Introduced
Lamiaceae	Mesosphaerum pectinatum (L.) Kuntze	Herb	Naturalized-Introduced
Lauraceae	Cinnamomum camphora (L.) J.Presl	Tree	Naturalized-Introduced
Malvaceae	Callianthe megapotamica (A.Spreng.) Dorr	Shrub	Introduced-Cultivated
Malvaceae	Hibiscus lunariifolius Willd.	Herb	Introduced
Malvaceae	Malva verticillata L.	Herb	Introduced
Meliaceae	Melia azedarach L.	Tree	Introduced
Myrtaceae	Eucalyptus camaldulensis Dehnh.	Tree	Cultivated-Naturalized
Myrtaceae	Psidium cattleianum Sabine	Tree	Cultivated
Myrtaceae	Psidium guajava L.	Tree	Naturalized-Introduced
Myrtaceae	Syzygium jambos (L.) Alston	Tree	Cultivated
Passifloraceae	Passiflora edulis Sims	Climber	Cultivated-Naturalized
Poaceae	Coix lacryma-jobi L.	Herb	Introduced
Poaceae	<i>Setaria sulcata</i> Raddi	Herb	Naturalized-Introduced
Proteaceae	Grevillea robusta A. Cunn. ex R.Br.	Tree	Naturalized-Introduced
Rosaceae	Rubus niveus Thunb.	Shrub	Naturalized-Introduced
Rosaceae	Rubus rosifolius Sm.	Shrub	Naturalized-Introduced
Solanaceae	Nicandra physalodes (L.) Gaertn.	Herb	Cultivated
Solanaceae	Nicotiana tabacum L.	Herb	Cultivated-Naturalized
Ooiaiiaccac			
Solanaceae	Physalis peruviana L.	Herb	Naturalized-Introduced

Family	Species	Habit	Status
Solanaceae	Solanum mauritianum Scop.	Shrub/Tree	Naturalized-Introduced
Solanaceae	Solanum seaforthianum Andrews	Climber	Naturalized-Introduced
Verbanaceae	Lantana camara L.	Shrub	Naturalized
Verbanaceae	Stachytarpheta urticifolia Sims	Subshrub	Naturalized-Introduced

**Table 7.** Life form representatives of different categories of vascular plant species in Taita Hills.

Life forms		Number of vascular plant species	
_	Endemic and near-endemic	Threatened and near-threatened	Exotic
Trees	22	31	13
Shrubs	26	25	12
Lianas	3	1	_
Subshrubs	2	2	4
Herbs	31	29	28
Climbers	7	1	2

each), Amaranthaceae and Solanaceae (six species each). In terms of life forms, herbs were the most abundant (28 species) corresponding to 47.46%, followed by trees (13 species) 22.03%, shrubs (12 species) 20.34%, subshrubs (four species) 6.78%, and climbers (two species) 3.39% (Table 7).

## **Discussion and conclusion**

The findings of this study validate Taita Hills as a floristically important area with a high diversity of plants as well as rare and endemic plant species. Its unique geographical position near the coastal strip and within an arid and semi-arid landscape provides for multiple habitats which subsequently support a wide range of taxa. The 1594 total taxa recorded represent 25.33% of all vascular plants found in Kenya (Zhou et al. 2017). This area also has a significant portion of lycophytes and pteridophytes representing 8.72% of all total records in this study.

The most species-rich families are Fabaceae, Rubiaceae, Asteraceae, Orchidaceae, Apocynaceae, Malvaceae and Euphorbiaceae. These results concur with similar studies conducted in other tropical rainforests such as the Coastal forests of Kenya (Ngumbau et al. 2020) and the Nandi forests (Melly et al. 2020), as well as other forests in the Afromontane archipelago of East Africa such as the Aberdares forests (Kipkoech et al. 2020), Agama forest (Addi et al. 2016), Afromontane forests of Ethiopia (Senbeta et al. 2014), and the Jibat Afromontane forest (Burju et al. 2013). Euphorbiaceae, Orchidaceae, and Rubiaceae are the most important families in Taita Hills in terms of species richness, endemism, and conservation status as all of them have substantial numbers in all three categories. Herbs were the most prevalent growth forms recorded in Taita Hills, especially in the forest habitats in both the understory and margins. However, woody plant life forms also formed a considerable amount of the total percentage of recorded plant life forms supporting the observation by Senbeta et al. (2014) that moist evergreen Afromontane forests sustain a high density of woody plants. Exotic species

recorded in this study represent 3.85% of the total number of species. Solanaceae, Asteraceae, and Fabaceae have the highest number of exotic species. This concurs with the study done by Ngumbau et al. (2020) on the coastal forests of Kenya. A large number of these exotic species have colonized natural habitats and have also been listed as invasive (Spanhove and Lehouck 2008; Thijis et al. 2013). Mitigating the introduction of exotic tree species and levels of disturbance within indigenous forests might increase the recruitment of indigenous tree seedlings and subsequently the restoration of the original native forest status (Omoro and Luukkanen 2011).

The hilltop mist forests have been of great botanical appeal owing to their unique flora with Afromontane and rainforest elements (Beentje 1988, Thijis et al. 2013). The discovery of a new species and a new record within the rainforest fragments show that these forests are a biodiversity reservoir with more potential for scientific exploration. However, the high human population within the Taita-Taveta district resides within the hills and the demand for more agricultural and settlement land has put additional anthropogenic pressures on the already severely fragmented landscape (Bytebier 2001; CEPF 2005). Threatened and near-threatened taxa in Taita Hills according to IUCN (2021) represent 4.11% and 1.31% of the total taxa recorded. Although these figures might be small compared to the total, the probable loss of the already small habitats puts these species at a higher extinction risk on a local scale. A high percentage of species from Taita Hills have not been assessed (69.63%). Out of those that are assessed, most have been evaluated to be of least concern and thus are not facing imminent risk. Nonetheless, some of the species, though evaluated to be of LC, are also indicated as decreasing in the wild, thus presenting a potential risk to such, in the absence of strict conservation measures. In some cases, the global assessment might not reflect the real picture in specific local sites. The populations of species such Kuloa usambarensis (Engl.) Trofimov & Rohwer and Podocarpus latifolius (Thunb.) R.Br. ex Mirb., both evaluated as LC, and Mitragyna rubrostipulata (K.Schum.) Havil., whose status has not been evaluated according to IUCN, have decreased to critical levels due to selective harvesting (Beentje 1988; Thijis et al. 2013). Ngangao forest fragment was recorded to have the highest number of range restricted taxa while many of the lesser fragments were recorded to have single endemics. This poses a great risk as there have been indications of fragmentation leading to the loss of endemic species. There is a need for a localized Red List for the forests to determine the level of species threats.

The Taita Hills have been part of the local community's culture and the people have utilized these forests for many years. More community-based conservation programs should be introduced to promote the sustainable utilization of renewable forest resources while promoting regeneration (Himberg 2004). The regeneration of indigenous forests will not only improve the quality of habitat for endemic plants but also increase habitable ecosystems for range-restricted birds within the different fragments (Mwang'ombe 2005). Previously restored indigenous forests have exhibited a high abundance in avifaunal species compared to exotic forests. Restorations especially between larger fragments can act as migration corridors for endemic bird species and subsequently increase indigenous vegetation cover while mitigating the extinction risk of range restricted species (Borghesio et al. 2017). In addition to an increase in natural

forest cover, native tree regeneration will protect the plant diversity within the fragments as studies in Taita Hills have shown that indigenous forests tend to have a higher plant diversity compared to exotic forests (Omoro et al. 2010). The comprehensive listing of endemic and threatened species in this study will serve as a guideline to enable policy-makers to make more informed and appropriate decisions beneficial for the conservation and management of biodiversity in the area. It also sets a foundation for other floristic studies in these forests and updates the plant biodiversity records of the Taita hills ranges.

## Checklist

This checklist records comprehensively the vascular plants of the Taita Hills in their respective families which have been listed alphabetically. The families are grouped into six classes namely Lycopodiopsida, Polypodiopsida, Cycadopsida, Pinopsida, Liliopsida and Magnoliopsida. Taxa of Lycopodiopsida and Polypodiopsida are classified based on the Pteridophyte Phylogeny Group I system (PPG 1 2016), Pinopsida and Cycadopsida according to Christenhusz et al. (2011), while Liliopsida and Magnoliopsida are classified, based on the APG IV system (Chase et al. 2016). For each species recorded, information on its life form, habitat, altitudinal range of occurrence (in meters) and voucher number(s) is listed. Species names that are succeeded with a letter, (e.g. A), indicate that they have not been described yet. Those with a genus name succeeded by "sp" indicate that they were listed as such and cannot be identified further as the specimen material available is not sufficient to make a satisfactory identification to the specific level. In the case where no elevational information was available for a species; an elevation estimate of the named place locality was made using Google Earth. Exotic species are marked by an asterisk (\*) before the species name, while species names preceded by (E) and (NE) signify endemic and near-endemic species respectively. Species of conservation concern are indicated as such using the IUCN Red List categories and criteria. Herbaria are listed according to their respective codes: EA (East African Herbarium, Nairobi, Kenya) and HIB (Hubei Institute of Botany, Wuhan, China). SAJIT means Sino-Africa Joint Investigation Team, NMK refers to the National Museum of Kenya and KEFRI stands for the Kenya Forestry Research Institute.

# Part I. Lycopodiopsida

## F1. LYCOPODIACEAE

3 Genera, 6 species

Huperzia verticillata (L.f.) Trevis. – Habit: Herb. Habitat: Intermediate and montane evergreen forest, 1440–1550 m. Vouchers: Faden RB et al. 71/53 & 91 (EA).
Lycopodium clavatum L. – Habit: Herb. Habitat: Moist montane forest, 1800–2200 m. Vouchers: Kamau P & Christenhusz MJM 648, Faden RB & Evans A 70/504, Drummond RB & Hemsley JH 4306, Gillett JB 17252 (EA).

- Palhinhaea cernua (L.) Franco & Vasc. Habit: Herb. Habitat: Disturbed areas in evergreen forest, loose sand, 1200–2200 m. Vouchers: Faden RB et al. NMK Exped. 416 & 1135, Beentje HJ et al. NMK Exped. 1116 (EA), Faden RB & Evans A 70/508 (EA).
- *Phlegmariurus durus* (Pic. Serm.) A.R.Field & Bostock Habit: Herb. Habitat: Rainforest, dry evergreen mist forest, intermediate wetter evergreen forest, 900–1500 m. Vouchers: Luke WRQ et al. 5367, Faden RB, Evans A & Githui M 70/180, 478 & 740, Faden RB et al. 71/157, Dale IR 3788, Faden RB et al. NMK Exped. 963 (EA).
- *Phlegmariurus holstii* (Hieron.) A.R.Field & Bostock Habit: Herb. Habitat: Mist forest, 1350–1875 m. Vouchers: Luke WRQ et al. 5351B, Faden RB et al. NMK Exped. 294, 415 & 772, Faden RB et al. 69/831, 71/55 & 158 (EA). Near Threatened.
- Phlegmariurus ophioglossoides (Lam.) A.R.Field & Bostock Habit: Herb. Habitat: Podocarpus upland evergreen forest, Newtonia, Macaranga mist forest, 1800–2200 m. Vouchers: Kamau P & Christenhusz MJM et al. 619 & 650, Faden RB et al. NMK Exped. 108, Drummond RB & Hemsley JH 4321, Faden RB et al. 70/490 (EA).

## F2. SELAGINELLACEAE

1 Genus, 4 species

- *Selaginella caffrorum* (Milde) Hieron. Habit: Herb. Habitat: Dry evergreen forest on seepage areas on sandstone, 1050–1585 m. Vouchers: Beentje HJ et al. NMK Exped. 896, Faden RB & Faden AJ 72/241, Schippers RR K312 (EA).
- **Selaginella goudotiana Spring** Habit: Herb. Habitat: Evergreen forest floor, rocks near stream sides, 1150–1250 m. Voucher: Faden RB, Evans A & Msafiri F 70/985 (EA).
- Selaginella kraussiana (Kunze) A.Braun Habit: Herb. Habitat: Moist ground in forest, near streams, 1350–2200 m. Vouchers: SAJIT–004539 (EA, HIB), Kamau P & Christenhusz MJM et al. 6617, Drummond RB & Hemsley JH 4320, Faden RB et al. NMK Exped. 75 & 1133, Beentje HJ et al. NMK Exped. 1089, Faden RB & Faden AJ 77/324, Faden RB et al. 70/492 (EA).
- Selaginella mittenii Baker Habit: Herb. Habitat: Wet rocks of streams and waterfalls in semi-deciduous woodland and evergreen forest, 790–1000 m. Vouchers: Faden RB et al. 69/446, Faden RB, Evans A & Msafiri F 70/968 (EA).

# Part 2. Polypodiopsida

## F3. ADIANTACEAE

1 Genus, 2 species

*Hemionitis doniana* (J.Sm. & Hook.) Christenh. – Habit: Herb. Habitat: Lowland evergreen forest, woodland on damp banks, ca. 914 m. Hildebrandt JM 2477a (EA).

*Hemionitis schweinfurthii* (Hieron.) Christenh. – Habit: Herb. Habitat: Rock outcrops, pavements, shady gullies in woodland and bushland, 600–1875 m. Vouchers: Mwachala G et al. EW3187, Faden RB, Evans A & Msafiri M 70/965, Faden RB et al. NMK Exped. 309, Schippers RR K311 (EA).

## F4. ANEMIACEAE

1 Genus, 2 species

- Anemia caffrorum (L.) Christenh. Habit: Herb. Habitat: Forest edges, ca. 2103 m. Vouchers: Schippers RR K264, Gardner HM 2982 (EA).
- Anemia vestita (Baker) Christenh. Habit: Herb. Habitat: Mist forest, roadside banks, 1500–2170 m. Vouchers: Kamau P & Christenhusz MJM et al. 624, Faden RB & Faden AJ 72/246, Faden RB, Evans A & Wolf T 69/833 (EA).

## F5. ASPLENIACEAE

4 Genera, 44 species

- **Asplenium adiantum-nigrum L.** Habit: Herb. Habitat: Shaded areas in mist forest, rock crevices, road banks, 1900–2134 m. Vouchers: Faden RB et al. 70/471 & 72/250, Schippers RR K270 (EA).
- Asplenium aethiopicum (Burm.f.) Bech. Habit: Herb. Habitat: Forest undergrowth, 1400–2000 m. Vouchers: Kamau P 390, Mwachala G et al. EW3070A, Kamau P & Christenhusz MJM et al. 608, Wakanene KM & Mwangangi OM 260 & 270, Schippers RR K243, Faden RB et al. NMK Exped. 56, Beentje HJ et al. NMK Exped. 924, Faden RB & Evans A 69/325 & 838, Faden RB et al 71/11 (EA).
- Asplenium albersii Hieron. Habit: Herb. Habitat: Mist forest, 1400–1850 m. Vouchers: Faden RB et al. NMK Exped. 424 & 959, Faden RB, Evans A & Smeenk C 70/530 & 556 (EA).
- Asplenium anisophyllum Kunze Habit: Herb. Habitat: Moist forest, 1500–1700 m. Vouchers: Luke WRQ et al. 4184, Faden RB et al. 69/826 (EA).
- Asplenium barteri Hook. Habit: Herb. Habitat: Moist forest, near river, 1400–1850 m. Vouchers: Kamau P 445, Kamau P & Christenhusz MJM et al. 634, NMK Taita Hills Exped. 778A, 782 & 1126, Faden RB et al. 71/3 (EA).
- Asplenium boltonii Hook. ex Schelpe Habit: Herb. Habitat: Moist forest, 1500–2175 m. Vouchers: Kamau P 402, Faden RB et al. NMK Exped. 272a & 312, Faden RB & Faden AJ 77/327, Faden RB 69/874 & 70/465 (EA).
- Asplenium buettneri Hieron. ex Brause Habit: Herb. Habitat: Shallow soil on rocks in forest, 1275–2170 m. Vouchers: Faden RB et al. NMK Exped. 316, Faden RB et al. 70/526 (EA).
- Asplenium christii Hieron. Habit: Herb. Habitat: Moist forest, stream banks, 1400–1875 m. Vouchers: Kamau P 393, Schippers RR K240, Faden RB et al. NMK Exped. 261, Beentje HJ et al. NMK Exped. 1091, Faden RB & Faden AJ 77/321, Faden RB et al. 70/558 & 71/4 (EA).

- Asplenium dregeanum Kunze Habit: Herb. Habitat: Moist forest, waterfalls, along streams, 1250–1433 m. Vouchers: Luke WRQ & Luke PA 5362, Hemp A 5373, Schippers RR K323, Faden RB, Evans A, Rathbun G 69/468, Faden RB, Evans A, Msafiri F 70/993, Reichstein T 2894, Napper DM, Gillett JB, Bally PRO 2169 (EA).
- Asplenium elliottii C.H.Wright Habit: Herb. Habitat: Undergrowth in moist forest, 1425–2195 m. Vouchers: Kamau P 458, Kamau P & Christenhusz MJM et al 592, Faden RB et al. NMK Exped. 272 & 389, Faden RB & Githui M 70/728, Faden RB & Faden AJ 77/331, Schippers RR K280 (EA).
- Asplenium erectum Bory ex Willd. Habit: Herb. Habitat: Mist forest floor, along streams on banks, 1250–1875 m. Vouchers: Kamau P 410, Faden RB et al. NMK Exped. 267 & 397, Faden RB & Faden AJ 77/333, Schippers RR K245, K252, K296 & K322, Faden RB, Evans A, Msafiri F 70/534, 994 & 71/16, Joanna B 9087 (EA).
- Asplenium friesiorum C.Chr. Habit: Herb. Habitat: Moist forest, 1425–2134 m. Vouchers: Kamau P 398, Schippers RR K266, Faden RB et al. NMK Exped. 314 & 968, Faden RB et al. 69/821 (EA).
- Asplenium holstii Hieron. Habit: Herb. Habitat: Wet evergreen forest on moist rocks, logs, under waterfalls, 1350–1875 m. Vouchers: Kamau P 394 & 417, Luke WRQ & Luke PA 4145, Faden RB et al. NMK Exped. 320, 418 & 966, Schippers RR K256 & 325, Gillett JB, Burtt BL & Osborn RM 17133, Faden RB et al. 69/834, 70/466 & 555 (EA).
- Asplenium hypomelas Kuhn Habit: Herb. Habitat: Moist primary forest on tree ferns or terrestrial, 1350–2050 m. Vouchers: Kamau P 443, Kamau P & Christenhusz MJM et al. 618, Beentje HJ et al. NMK Exped. 1083, Faden RB et al. 69/820 (EA).
- Asplenium inaequilaterale Willd. Habit: Herb. Habitat: Moist forest on rocks in deep shade, streams banks, 1425–1925 m. Vouchers: Kamau P 459, Faden RB et al. NMK Exped. 409, Schippers RR K239 & 324, Faden RB et al. 69/863 (EA).
- Asplenium linckii Kuhn Habit: Herb. Habitat: Deeply shaded wet evergreen forest, 1425–1925 m. Vouchers: Kamau P 395, Kamau P & Christenhusz MJM et al. 584, Faden RB et al. NMK Exped. 270 & 410, Schippers RR K238 & 255A, Faden RB & Faden AJ 69/865 & 77/329, Drummond RB & Hemsley JH 4340, Lubai lK HB 26 (EA).
- Asplenium loxoscaphoides Baker. Habit: Herb. Habitat: Moist montane forest, on rocks, along river, 1400–1800 m. Voucher: Kamau P, Christenhusz MJM, Chase MW, Mbale M & Kyaa J 641 (EA).
- Asplenium gemmiferum Schrad. Habit: Herb. Habitat: Moist forest, 1700–1950 m. Voucher: Kamau P, Christenhusz MJM, Chase MW, Mbale M & Kyaa J 590 (EA).
- Asplenium macrophlebium Baker Habit: Herb. Habitat: Intermediate wet evergreen forest, 1425–1875 m. Vouchers: Kamau P 424, Kamau P & Christenhusz MJM 583 & 589, Faden RB et al. NMK Exped. 321 & 960, Faden RB & Faden AJ 77/323, Faden RB & Githui M 70/754 (EA).

- Asplenium mannii Hook. Habit: Herb. Habitat: Epiphytic in moist forest, 1530–1630 m. Voucher: Faden RB et al. 70/488 (EA).
- Asplenium megalura Hieron. Habit: Herb. Habitat: Moist forest, often near streams, 1250–1950 m. Vouchers: Kamau P 436, Kamau P & Christenhusz MJM 598, Faden RB et al. 71/49 & 137, Faden RB et al. NMK Exped. 965 (EA).
- Asplenium normale D.Don Habit: Herb. Habitat: Moist primary forest, 1200–1850 m. Vouchers: Kamau P 386, Luke WRQ & Luke PA 4121b, Faden RB et al. NMK Exped. 375, Faden RB et al. 69/829 (EA).
- Asplenium variabile Hook. Habit: Herb. Habitat: Moist forest, along streams and waterfalls, 1425–1850 m. Vouchers: Kamau P 403 & 425, Kamau P & Christenhusz MJM et al. 640, Faden RB et al. NMK Exped. 366, Bytebier B 1179, Faden RB et al. 70/561 (EA).
- Asplenium peteri Bech. Habit: Herb. Habitat: Mist or swamp forest, ca. 1480 m. Voucher: Luke WRQ et al. 5368 (EA).
- Asplenium rutifolium (Bergius) Kunze Habit: Herb. Habitat: Moist and dry evergreen forest, dry rocks in shade, river banks, 762–1780 m. Vouchers: Kamau P 434, Schippers RR K317A, Faden RB et al. 69/327 & 70/451, Hildebrandt JM 2470 (EA).
- Asplenium sandersonii Hook. Habit: Herb. Habitat: Epiphytic on tree trunks in forest, 950–1400 m. Vouchers: Mungai GM et al. EW3166, Faden RB et al. 69/470, Joanna B 8844, Drummond RB & Hemsley JH 4374 (EA).
- Asplenium simii A.F.Braithw. & Schelpe Habit: Herb. Habitat: Epiphytic in mist forest, 1500–1630 m. Vouchers: Beentje HJ et al. NMK Exped. 833, Faden RB et al. 70/484 (EA).
- Asplenium smedsii Pic. Serm. Habit: Herb. Habitat: Moist upland forest, ca. 1830 m. Voucher: Faden RB & Faden AJ 77/327 (EA).
- Asplenium sp. A Habit: Herb. Habitat: Epiphytic in forest, 1400–1800 m. Voucher: Kamau P, Christenhusz MJM, Chase MW, Mbale M & Kyaa J 637 (EA).
- *Asplenium stuhlmannii* Hieron. Habit: Herb. Habitat: Moist forest on rock outcrops and crevices, 1275–1325 m. Voucher: Faden RB et al. 70/520 (EA).
- Asplenium theciferum (Kunth) Mett. Habit: Herb. Habitat: Low to high epiphyte in forest, woodland or thicket, on rocks, 1067–1950 m. Vouchers: Kamau P 397, Kamau P & Christenhusz MJM 591, Wakanene KM & Mwangangi OM 672, Schippers RR K251 & 292, Drummond RB & Hemsley JH 4396, Faden RB et al. NMK Exped. 197, Beentje HJ et al. NMK Exped. 826, Faden RB et al. 70/480 (EA).
- *Hymenasplenium unilaterale* (Lam.) Hayata Habit: Herb. Habitat: Moist forest, near streams and waterfalls, 1440–1950 m. Vouchers: Kamau P 431, Kamau P & Christenhusz MJM 600, Faden RB et al. 70/470, 540 & 71/245, van Someren C 850, Faden RB et al. s.n. (EA).
- *Phegopteris cruciata* (Willd.) Mett. Habit: Herb. Habitat: Streambank in wet evergreen forest, moist sites, 1440–2200 m. Vouchers: Faden RB et al. 70/500 & 577 (EA).

- **Thelypteris bergiana** (Schltdl.) Ching Habit: Herb. Habitat: Evergreen forest along rivulet and in wet places, 1219–2170 m. Vouchers: Reichstein & Bally PRO 2917, Faden RB et al. NMK Exped. 1150, Schippers RR K275 & 301, Faden RB et al. 70/499 (EA).
- **Thelypteris chaseana Schelpe** Habit: Herb. Habitat: Mist forest along stream sides, riverine forest, river valleys with *Terminalia*, *Combretum*, *Acacia*, 800–1525 m. Vouchers: Kabuye CHS et al. NMK Exped. 631, Faden RB, Evans A, Githui M, Osborn R, Smeenk C 71/243 (EA).
- *Thelypteris confluens* (Thunb.) C.V.Morton Habit: Herb. Habitat: Swampy areas, 1800–1925 m. Voucher: Faden RB & Evans A 69/885 (EA).
- **Thelypteris dentata** (Forssk.) E.P.St.John Habit: Herb. Habitat: Evergreen forest, usually riverine, 870–1550 m. Vouchers: Schippers RR K235, 248 & 304, Faden RB et al. 70/463 & 71/222, Beentje HJ et al. NMK Exped. 830 (EA).
- **Thelypteris gueintziana** (Mett.) Schelpe Habit: Herb. Habitat: By forest streams, rock faces above rivers, wet ditches along road, 870–1600 m. Vouchers: Schippers RR K234, 236 & 299, Faden RB et al. 69/828, 70/448 & 450 (EA).
- **Thelypteris interrupta** (Willd.) K.Iwats. Habit: Herb. Habitat: Swampy area, riverine bushland, 1275–1282 m. Vouchers: Kamau P 440, Faden RB et al. 70/519 (EA).
- **Thelypteris madagascariensis** (**Fée**) **Schelpe** Habit: Herb. Habitat: Evergreen rainforest, forest edges, roadside, 1300–1875 m. Vouchers: Faden RB et al. NMK Exped. 471, Schippers RR K247, Gillett JB et al. 18768, Faden RB et al. 70/468 (EA).
- *Thelypteris oppositiformis* (C.Chr.) Ching Habit: Herb. Habitat: Evergreen forest in moist places, 2000–2208 m. Voucher: Faden RB et al. 72/249 (EA).
- *Thelypteris pozoi* (Lag.) C.V.Morton Habit: Herb. Habitat: Upland forest, often by streams, 1900–2205 m. Voucher: Faden RB et al. 72/242 (EA).
- *Thelypteris pulchra* (Bory ex Willd.) Schelpe Habit: Herb. Habitat: Riverine forest, stream banks, 1425–2000 m. Vouchers: Faden RB et al. 71/236, Beentje HJ et al. NMK Exped. 925 (EA).
- NE *Thelypteris usambarensis* (Holttum) Christenh. Habit: Herb. Habitat: Evergreen forest, ca. 1829 m. Voucher: Joanna B 9035 (EA). Endangered.

## **F6. ATHYRIACEAE**

2 Genera, 3 species

- **Deparia boryana** (Willd.) M.Kato Habit: Herb. Habitat: Evergreen forest by streams, 1740–2000 m. Voucher: Beentje HJ et al. NMK Exped. 937 (EA).
- *Deparia zanzibarica* (Baker) Christenh. Habit: Herb. Habitat: Wet evergreen forest, 2000–2200 m. Voucher: Faden RB et al. 70/495 (EA).
- *Diplazium nemorale* (Baker) Schelpe Habit: Herb. Habitat: Moist gullies in intermediate wet evergreen forest, 1525–1850 m. Vouchers: Kamau P 428, Faden RB et al. 70/756 (EA).

## F7. BLECHNACEAE

2 Genera, 2 species

- **Blechnum bakeri** C.Chr. Habit: Herb. Habitat: Intermediate wet evergreen forest, 1400–1850 m. Vouchers: Faden RB et al. 71/178, Faden RB & Githui M 70/752 (EA).
- Lomaridium attenuatum (Sw.) Gasper & V.A.O.Dittrich Habit: Herb. Habitat: Moist montane and evergreen forest, rocky stream banks and waterfalls, 1755–1850 m. Vouchers: Kamau P 426, Kamau P & Christenhusz MJM et al. 623, Luke WRQ & Luke PA 4124, Faden RB & Githui M 70/732 (EA).

## F8. CYATHEACEAE

1 Genus, 3 species

- Alsophila dregei (Kunze) R.M.Tryon Habit: Tree. Habitat: Forest along streams, 1100–1850 m. Vouchers: Kamau P 438, Mwachala G et al. EW3544, Faden RB et al. 70/518, Beentje HJ et al. NMK Exped. 1166 (EA).
- Alsophila humilis (Hieron.) Pic.Serm. Habit: Tree. Habitat: Moist forest gullies, intermediate wet evergreen forest, 1950–2208 m. Vouchers: Kamau P & Christenhusz MJM et al. 617, Faden RB & Githui M 70/757 (EA).
- Alsophila manniana (Hook.) R.M.Tryon Habit: Tree. Habitat: Hilltops, shaded and open slopes of evergreen forest, 1525–2205 m. Vouchers: Kamau P & Christenhusz MJM et al. 628, Faden RB et al. NMK Exped. 757, Schippers RR K267, Faden RB & Githui M 70/716, Faden RB & Faden AJ 72/256, Gillett JB 17246 (EA).

#### F9. DAVALLIACEAE

1 Genus, 1 species

Davallia chaerophylloides (Poir.) Steud. – Habit: Herb. Habitat: Mist forest, 820–900 m. Voucher: Faden RB et al. 70/162B (EA).

## F10. DENNSTAEDTIACEAE

4 Genera, 8 species

- Blotiella glabra (Bory) R.M.Tryon Habit: Herb. Habitat: Mist forest, rainforest, ca. 1371 m. Voucher: Dale IR 3794 (EA).
- NE Blotiella hieronymi (Kümmerle) Pic. Serm. Habit: Herb. Habitat: Forest floor, margins in intermediate rainforest, 1450–2000 m. Vouchers: Kamau P & Christenhusz MJM et al. 582 & 620, Wakanene KM & Mwangangi OM 219, Hemp A 5368, Faden RB, Evans A & Smeenk C 70/563b & 563c, Faden RB, Evans A & Wolf 69/844, Gillett JB, Burtt BL & Osborn RM 17147 (EA). Endangered.
- Blotiella stipitata (Alston) Faden Habit: Herb. Habitat: Mist forest, wet evergreen forest, 1000–1900 m. Vouchers: Kamau P 391, WRQ Luke & PA Luke 4142,

- Faden RB et al. NMK Exped. 271 & 815, Hemp A 5370, Faden RB et al. 69/458 & 71/175, Drummond RB & Hemsley JH 4355 (EA).
- Blotiella stipitata (Alston) Faden subsp. nov Habit: Herb. Habitat: Mist forest, 1400–1680 m. Vouchers: Faden RB, Evans A & Msafiri F 71/39, Faden RB, Evans A & Smeenk C 70/563A (EA).
- *Blotiella stipitata* (Alston) Faden × *Blotiella glabra* (Bory) R.M.Tryon Habit: Herb. Habitat: Montane forest, 1400–1600 m. Voucher: Faden RB et al. 71/174 (EA).
- *Hypolepis sparsisora* (Schrad.) Kuhn Habit: Herb. Habitat: Wet upland and evergreen montane forest, 1530–1785 m. Vouchers: Kamau P & Christenhusz MJM et al. 599, van Someren HD 855, Faden RB et al. 70/469, Faden RB et al. NMK Exped. 469 (EA).
- *Hypolepis* aff. *rugosula* subsp. *africana* (C.Chr.) Schwartsb. & J.Prado Habit: Herb. Habitat: Forest clearings, 1425–1850 m. Voucher: NMK Taita Hills Exped. 401 (EA).
- *Microlepia speluncae* (L.) T.Moore Habit: Herb. Habitat: Forest and plantation edges, ditch sides, stream sides, ca. 1766 m. Voucher: Kamau P 415 (EA).
- Pteridium aquilinum (L.) Kuhn Habit: Herb. Habitat: Rainforest clearings and margins, riparian forest, rocky places, 1275–1645 m. Vouchers: Kamau P & Christenhusz MJM et al. 606, Wakanene KM & Mwangangi OM 248, Schippers RR K237, Faden RB et al. 69/814, Faden RB, Faden AJ, Evans A & Smeenk C 70/522, Faden RB, Faden AJ, Evans A, Kariuki & Smeenk C 71/189 (EA).

## F11. EQUISETACEAE

1 Genus, 1 species

*Equisetum ramosissimum* Desf. – Habit: Herb. Habitat: Riparian forest, 800–1000 m. Vouchers: Kabuye CHS et al. NMK Exped. 836 (EA), Mwachala G et al. EW1684 (EA), Faden RB et al. 70/446 (EA).

## F12. GLEICHENIACEAE

1 Genus, 1 species

Dicranopteris linearis (Burm.f.) Underw. – Habit: Herb. Habitat: Rainforest, rocky banks by streams, 1067–1850 m. Vouchers: Faden RB et al. NMK Exped. 419, Beentje HJ et al. NMK Exped. 1041, Schippers RR K283, Bytebier B, Luke WRQ & Pakia M 5360, Goyder DJ, Masinde PS, Whitehouse C 4020, Faden RB et al. 69/817 & 71/190, Bally PRO et al. 2164, Gardner HM 2943, Gillett JB, Burtt BL & Osborn RM 17163 (EA).

## F13. HYMENOPHYLLACEAE

2 Genera, 12 species

*Hymenophyllum capillare* Desv. – Habit: Herb. Habitat: Moist forest on tree trunks and moist cliff surfaces, 1450–1660 m. Vouchers: Kamau P & Christenhusz MJM et al. 644, Luke WRQ & Luke PA 4214, Faden RB & Faden AJ 71/1022 (EA).

- Hymenophyllum kuhnii C.Chr. Habit: Herb. Habitat: Rock faces in moist forest, 1200–1850 m. Vouchers: Luke WRQ et al. 4186, Beentje HJ et al. NMK Exped. 973, Faden RB et al. NMK Exped. 443, Faden RB & Githui M 70/705, Napper DM, Gillett JB & Bally PRO 2173, Faden RB, Evans A & Wolf T 69/845 & 849 (EA).
- Hymenophyllum sibthorpioides (Bory ex Willd.) Mett. ex Kuhn Habit: Herb. Habitat: Shady rocks in mist forest, 1200–1850 m. Vouchers: Kamau P 419, Luke WRQ & Luke PA 4095D, Beentje HJ et al. NMK Exped. 974, Faden RB, Evans A & Wolf T 69/848, Napper DM, Gillett JB & Bally PRO 2172, Faden RB et al. 70/546 (EA).
- NE Hymenophyllum sp. A of FTEA Habit: Herb. Habitat: Moist shady rocks in moist forest, 1788–1850 m. Vouchers: Kamau P 456, Kamau P & Christenhusz MJM et al. 644 (EA).
- *Hymenophyllum splendidum* Bosch Habit: Herb. Habitat: Moist forest near water, ca. 1200 m. Voucher: Napper DM, Gillett JB & Bally PRO 2175 (EA).
- *Trichomanes chevalieri* Christ Habit: Herb. Habitat: Rocks in moist forest, often on spray zone, 1400–1600 m. Voucher: Faden RB et al. NMK Exped. 59 (EA).
- *Trichomanes cupressoides* (**Desv.**) Habit: Herb. Habitat: Moist forest in wet places, ca. 1067 m. Voucher: Schippers RR K293 (EA).
- *Trichomanes diaphanum* Kunth Habit: Herb. Habitat: In moist forest by streams, moss covered rocks, 1400–1850 m. Vouchers: Luke WRQ et al. 4187 (EA), Faden RB et al. 70/702 (EA).
- *Trichomanes erosum* Willd. Habit: Herb. Habitat: Moist forest on rocks and tree ferns, 1423–1850 m. Vouchers: Kamau P & Christenhusz MJM et al. 635, Faden RB & Githui M 70/718, Schippers RR K327 (EA).
- *Trichomanes frappieri* Cordem. Habit: Herb. Habitat: Moist forest near water or rock surfaces by falls, 1275–1325 m. Voucher: Faden RB et al. 70/524 (EA).
- *Trichomanes melanotrichum* Schltdl. Habit: Herb. Habitat: Mist forest, waterfall sprays and streams, 820–2170 m. Vouchers: Schippers RR K326, Faden RB & Githui M 70/172, 523, 547 & 753, Faden RB et al. NMK Exped. 139, Faden RB et al. 69/847, Beentje HJ et al. NMK Exped. 972 (EA).
- *Trichomanes rigidum* Sw. Habit: Herb. Habitat: Moist forest, deeply shaded stream banks, under large rocks, 1150–1270 m. Vouchers: Faden RB et al. 69/467, Faden RB et al. 70/571 & 984 (EA).

## F14. MARATTIACEAE

1 Genus, 1 species

Ptisana fraxinea (Sm.) Murdock – Habit: Herb. Habitat: Montane forest, along rivers, 1219–1850 m. Vouchers: Kamau P & Christenhusz MJM et al. 638, Schippers RR K306 & 320, Gillett JB, Burtt BL & Osborn RM 17168, Faden RB et al. NMK Exped. 788, Gardner HM 2990, Faden RB & Githui M 70/473 & 715 (EA).

## F15. OPHIOGLOSSACEAE

1 Genus, 1 species

- Ophioglossum vulgatum L. subsp. africanum Pocock ex J.E.Burrows Habit: Herb. Habitat: Ecotone between grassland and evergreen montane forest, 1900–2000 m. Voucher: Faden RB & Faden AJ et al. 72/245 (EA).
- *Ophioglossum vulgatum* L. subsp. *kilimandsharicum* (Hieron.) J.E.Burrows Habit: Herb. Habitat: Montane grassland or scrub, path sides on forest edges, 1450–1525 m. Voucher: Faden RB et al. 71/240 (EA).

## F16. OSMUNDACEAE

1 Genus, 1 species

Osmunda regalis L. – Habit: Herb. Habitat: Wet evergreen forest, 2000–2170 m. Voucher: Faden RB et al. NMK Exped. 1152 (EA).

## F17. POLYPODIACEAE

16 Genera, 23 species

- Arachniodes webbiana (A.Braun) Schelpe subsp. foliosa (C.Chr.) Gibby, Rasbach, Reichst., Widén & Viane Habit: Herb. Habitat: Montane and intermediate forest, 1372–2164 m. Vouchers: Kamau P 412, Faden RB et al. NMK Exped. 148, 782 & 1153, Faden RB et al. 69/472 & 70/998, Schippers RR K278 & 321 (EA).
- Arachniodes webbiana (A.Braun) Schelpe subsp. webbiana Habit: Herb. Habitat: Montane forest, ca. 2050 m. Voucher: Kamau P & Christenhusz MJM et al. 613 (EA).
- Arthropteris orientalis (Gmel.) Posth. Habit: Herb. Habitat: Mist forest, 910–1875 m. Vouchers: Kamau P 596, Mungai GM et al. EW3278, Drummond RB & Hemsley JH 4393, Faden RB et al. 70/554, Faden RB et al. NMK Exped. 315, Joanna B 8881 (EA).
- Ctenitis cirrhosa (Schumach.) Ching Habit: Herb. Habitat: Moist forest, often near streams, 1260–1850 m. Vouchers: Kamau P 422, Kabuye CHS et al. NMK Exped. 807, Faden RB et al. 70/549, Faden RB et al. NMK Exped. 792 (EA).
- *Didymochlaena truncatula* (Sw.) J.Sm. Habit: Herb. Habitat: Mist forest on stream sides and moist gullies, 1250–1850 m. Vouchers: Kamau P & Christenhusz MJM et al. 603, Faden RB et al. NMK Exped. 787, Gillett JB 18764, Faden RB et al. 69/464, 70/472 & 758, Joanna B 8983 & 9049 (EA).
- *Drynaria laurentii* (Christ) Hieron. Habit: Herb. Habitat: Fringing forest and associated woodland, 600–1200 m. Vouchers: Archer PG 14368 & 15010 (EA).
- *Dryopteris inaequalis* (Schltdl.) Kuntze Habit: Herb. Habitat: Montane forest, riverine forest, 1400–2170 m. Vouchers: Faden RB et al. NMK Exped. 53, 422 & 1149, Faden RB & Evans A 69/844, Joanna B 9397 (EA).

- *Dryopteris kilemensis* (Kuhn) Kuntze Habit: Herb. Habitat: Wet montane forest, 2000–2200 m. Vouchers: Faden RB et al. NMK Exped. 164, Faden RB et al. 70/498, Schippers RR K265 & 273 (EA).
- *Dryopteris manniana* (Hook.) C.Chr. Habit: Herb. Habitat: Moist and riparian forests, 1425–1875 m. Vouchers: Kamau P & Christenhusz MJM et al. 588, Faden RB et al. NMK Exped. 273 & 391, Faden RB et al. 69/4281, 71/219 & 77/340, Hemp A 5245 (EA).
- *Dryopteris pentheri* (Krasser) C.Chr. Habit: Herb. Habitat: Montane forest, riverine, woodland, 1425–2100 m. Vouchers: Kamau P 411 (EA), Bally PRO et al. 2972 (EA), Faden RB et al. 70/477 (EA), Faden RB et al. NMK Exped 422 (EA).
- *Elaphoglossum acrostichoides* (Hook. & Grev.) Schelpe Habit: Herb. Habitat: Rocks and soil in moist montane forest, ca. 1700–1800 m. Voucher: Faden RB et al. 71/1018 (EA).
- *Elaphoglossum deckenii* (Kuhn) C.Chr. Habit: Herb. Habitat: Montane forest, ca. 1480 m. Voucher: Luke WRQ et al. 5355B (EA).
- *Elaphoglossum lastii* (Baker) C.Chr. Habit: Herb. Habitat: Evergreen forest, 1250–1550 m. Vouchers: Faden RB, Evans A & Rathbun G 69/462, Faden RB, Evans A, Kariuki B & Smeenk C 71/148, Gillett JB 18767 (EA).
- Grammitis pygmaea (Mett.) Copel. Habit: Herb. Habitat: Moist montane forest, 1425–1850 m. Vouchers: Luke WRQ & Luke PA 4149, Faden RB et al. 69/846, 70/717 & 71/185, Gillett JB, Burtt BL & Osborn RM 17166, Faden RB et al. NMK Exped. 964 (EA).
- *Grammitis strangeana* (Pic.Serm.) Christenh. Habit: Herb. Habitat: Tree trunks in montane forest, 1500–1640 m. Vouchers: Luke WRQ et al. 4215, Faden RB, Evans A, Kariuki B & Smeenk C 71/186, Faden RB et al. 69/850 (EA).
- Lepisorus excavatus (Bory ex Willd.) Ching Habit: Herb. Habitat: Upland and montane evergreen forest, 1250–2170 m. Vouchers: Kamau P 399, Kamau P & Christenhusz MJM et al. 607, Faden RB et al. NMK Exped. 33, 297, 958, 1151, Beentje HJ et al. NMK Exped. 1094, Faden RB et al. 69/825, Faden RB et al. 70/507, 551 & 749, Schippers RR K242, 262, 281, 290 & 298 (EA).
- *Lepisorus schraderi* (Mett.) Ching Habit: Herb. Habitat: Ravines and waterfalls, 1650–1800 m. Voucher: Faden RB et al. 72/212 (EA).
- Lomariopsis warneckei (Hieron.) Alston Habit: Herb. Habitat: Moist montane forests, 1150–1875 m. Vouchers: Kamau P & Christenhusz MJM 643, Faden RB et al. NMK Exped. 319 & 390, Faden RB, Evans A, Wolf T 69/823 (EA), Faden RB & Githui M 70/532, 730, 755 & 999, Faden RB et al. 71/179, Gardner HM 2942 (EA).
- Loxogramme abyssinica (Baker) M.G.Price Habit: Herb. Habitat: Evergreen forest, riverbanks and rocky places, 1400–2134 m. Vouchers: Kamau P & Christenhusz MJM 593, Faden RB et al. NMK Exped. 9, Beentje HJ et al. NMK Exped. 824, Faden RB et al. 69/873, Schippers RR K254 & 272, Gillett JB, Burtt BL, Osborn RM 17132 (EA).

- *Megalastrum lanuginosum* (Kaulf.) Holttum Habit: Herb. Habitat: Moist forest, near water, 1440–1875 m. Vouchers: Kamau P 427 & 444, Kamau P & Christenhusz MJM et al. 595, Schippers RR K249, Faden RB et al. NMK Exped. 468, Faden RB et al. 70/548, Bally PRO 9036 (EA).
- *Oleandra distenta* Kunze Habit: Herb. Habitat: Evergreen forest, rocky caves, near water, rock faces, ca. 1250 m. Voucher: Faden RB, Evans A & Rathbun G 69/465 (EA).
- Pleopeltis macrocarpa (Willd.) Kaulf. Habit: Herb. Habitat: Moist evergreen forest, 1350–2195 m. Vouchers: Kamau P 392, Kamau P & Christenhusz MJM et al. 612 & 649, Schippers RR K253, 274, 277, 279 & 287, Beentje HJ et al. NMK Exped. 822 & 1093, Goyder DJ, Masinde PS & Whitehouse C 4022, Drummond RB & Hemsley JH 4395, Faden RB et al. NMK Exped. 7 (EA).
- Polystichum sinense (Christ) Christ Habit: Herb. Habitat: Moist forest, near streams, 1500–2205 m. Vouchers: Kamau P & Christenhusz MJM et al. 616, Faden RB et al. NMK Exped. 162 & 1148, Faden RB & Faden AJ 72/255, Faden RB, Evans A & Wolf T 69/836 (EA).
- Tectaria gemmifera (Fée) Alston Habit: Herb. Habitat: 850–1900 m. Vouchers: Kamau P & Christenhusz MJM et al. 601, Schippers RR K244 & 318, Faden RB et al. NMK Exped. 277 & 1168, Beentje HJ et al. NMK Exped. 825, Gillett JB, Burtt BL & Osborn RM 17144, Faden RB, Evans A & Rathbun G 69/426 & 872, Joanna B 8908 & 9040 (EA).

## F18. PSILOTACEAE

1 Genus, 1 species

*Psilotum nudum* (L.) P.Beauv. – Habit: Herb. Habitat: Dry riverbeds, under cliff overhangs, rock crevices, 870–1097 m. Vouchers: Bally PRO 8573 (EA), Faden RB, Glover PE & Evans A 70/445 (EA).

## F19. PTERIDACEAE

5 Genera, 20 species

- Actiniopteris dimorpha Pic.Serm. Habit: Herb. Habitat: Forests on granite outcrops and under boulders, 1350–1400 m. Voucher: SAJIT–005368 (EA, HIB).
- Actiniopteris radiata (Sw.) Link Habit: Herb. Habitat: Open deciduous woodland and bushland, rock crevices, 600–1150 m. Vouchers: Mwachala G et al. EW1190, Beentje HJ et al. NMK Exped. 654, Faden RB et al. 71/40, Faden RB, Evans A & Msafiri F 70/973 (EA).
- Adiantum capillus-veneris L. Habit: Herb. Habitat: Waterfalls, on wet rock, 1205–1981 m. Vouchers: Schippers RR K259, 288 & 303, Faden RB, Evans A & Wolf T 69/808, Hildebrandt JM 2537 & 8088 (EA).
- Adiantum hispidulum Sw. Habit: Herb. Habitat: Near waterfall and rivers, 825–1205 m. Vouchers: Mwachala G et al. EW3328, Faden RB & Evans A & Wolf T 69/809 (EA).

- Adiantum incisum Forssk. Habit: Herb. Habitat: Damp rocks, crevices, disturbed forest, 610–1524 m. Vouchers: Mwachala G et al. EW247 & 211, Kabuye CHS et al. NMK Exped. 643, Beentje HJ et al. NMK Exped. 1096, Schippers RR K316 & 285, Gillett JB & Burtt BL 17058, Bally PRO 12727, Hildebrandt JM 2473, Sacleux C 852, Abdullah et al. s.n. (EA).
- Haplopteris guineensis (Desv.) E.H.Crane Habit: Herb. Habitat: Wet evergreen mist forest, on rock faces, 1150–1400 m. Vouchers: Luke WRQ et al. 4183, Faden RB, Evans A & Msafiri F 70/987, Joanna B 8842 (EA).
- *Haplopteris volkensii* (Hieron.) E.H.Crane Habit: Herb. Habitat: Epiphytic and on boulders in upland and mist forests, 1700–1800 m. Voucher: Faden RB et al. 71/1024 (EA).
- *Hemionitis bergiana* (Schltdl.) Christenh. Habit: Herb. Habitat: Intermediate to montane evergreen forest, mist forest, 1700–1925 m. Vouchers: Faden RB & Evans A 69/867, Faden RB et al. NMK Exped. 550 (EA).
- *Hemionitis concolor* (Langsd. & Fisch.) Christenh. Habit: Herb. Habitat: Wet and dry forest floors and edges, moist bushland, 870–1875 m. Vouchers: Schippers RR K286, Faden RB et al. 70/460, Faden RB et al. NMK Exped. 538 (EA).
- *Hemionitis farinosa* (Forssk.) Christenh. Habit: Herb. Habitat: Forest remnants and edges, rock crevices, 1800–2170 m. Vouchers: Kamau P & Christenhusz MJM et al. 627, Faden RB et al. NMK Exped. 1146 (EA).
- Hemionitis multifida (Sw.) Christenh. Habit: Herb. Habitat: Forest wet and dry habitats, 1400–1981 m. Vouchers: Kamau P & Christenhusz MJM 625, Faden RB et al. NMK Exped. 52 & 513, Schippers RR K250, 260 & 309, Faden RB et al. 70/476 (EA).
- *Hemionitis quadripinnata* (Forssk.) Christenh. Habit: Herb. Habitat: Riparian forests, roadside banks, 1275–2200 m. Vouchers: Kamau P & Christenhusz MJM et al. 605 & 629, Faden RB et al. NMK Exped. 1128, Faden RB & Evans A 70/503 & 514, Schippers RR K261 (EA).
- *Hemionitis viridis* (Forssk.) Christenh. Habit: Herb. Habitat: Forest edges, riverbanks, rocky crevices and outcrops, *Acacia-Commiphora* woodland, roadsides, 914–1768 m. Vouchers: Mwachala G et al. EW2570, Goyder DJ, Masinde PS & Whitehouse C 4021, Schippers RR K264 & 294, Hildebrandt JM 2477, Sacleux C 1365, Faden RB et al. 70/525 & 71/30, Reichstein T & Bally PRO 2916 (EA).
- Pteris catoptera Kunze Habit: Herb. Habitat: Wet evergreen forest, stream sides, forest clearings, 1158–1850 m. Vouchers: Kamau P & Christenhusz MJM et al. 585, Wakanene KM & Mwangangi OM 279, Schippers RR K233, 289 & 295, Faden RB et al. NMK Exped. 411 & 892, Drummond RB & Hemsley JH 4379, Gillett JB & Burtt BL 17128, Faden RB et al. 69/330, 449, 827, 70/464, 988 & 71/2 (EA).
- *Pteris friesii* Hieron. Habit: Herb. Habitat: Forest, ca. 1829 m. Voucher: Joanna B 9042 (EA).
- Pteris dentata Forssk. Habit: Herb. Habitat: 1400–1500 m. Vouchers: Kamau P & Christenhusz MJM et al. 610, Beentje HJ et al. NMK Exped. 1086, Faden RB et al. NMK Exped. 58, Joanna B 8954 & 9047, Faden RB et al. 69/436, 871 & 71/34 (EA).

- Pteris pteridioides (Hook.) F.Ballard Habit: Herb. Habitat: Upland evergreen forest floor, stream sides, 1425–1850 m. Vouchers: Kamau P & Christenhusz MJM et al. 639, Beentje HJ et al. NMK Exped. 781, Joanna B 8991 & 9041, Faden RB et al. 71/1006 (EA).
- **Pteris usambarensis Hieron.** Habit: Herb. Habitat: Montane forest edges and road-side banks, 1000–1925 m. Vouchers: Wakanene KM, Mwangangi OM & Dunn B 363, Luke WRQ & Luke PA 4141, 5336 & 5495, Faden RB et al. NMK Exped. 274 & 412, Gillett JB 18765, Hemp A 5248 & 5371, Gardner HM 2944, Joanna B 9033, Faden RB et al. 69/473, 853, 868, 70/729 & 77/330 (EA).
- Pteris vittata L. Habit: Herb. Habitat: Forested hillslopes, cliffs, rocky areas, 800–1500 m. Vouchers: Kamau P & Christenhusz MJM et al. 646, Kabuye CHS et al. NMK Exped. 609, Schippers RR K232, Joanna B 8934 (EA).
- Vittaria isoetifolia Bory Habit: Herb. Habitat: Evergreen and mist forest, 1425–1850 m. Vouchers: Faden RB et al NMK Exped 962, Faden RB, Faden AJ, Evans A & Wolf T 69/851, Faden RB et al. 71/1023 (EA).

## Part 3. Cycadopsida

#### F20. ZAMIACEAE

1 Genus, 1 species

NE Encephalartos kisambo Faden & Beentje – Habit: Tree. Habitat: Low canopy dry evergreen mist forest, 900–1025 m. Vouchers: Faden RB, Faden AJ, Smeenk C, Smeenk N & Kichoi D 71/965, Archer PG 606 & 614, Willing TD & Robertson IJ 85/1 (EA). Endangered.

# Part 4. Pinopsida

#### F21. CUPRESSACEAE

1 Genus, 1 species

\**Callitris preissii* Miq. – Habit: Tree. Habitat: Shrubland, ca. 1371 m. Vouchers: Dyson WG 334 & 535 (EA).

#### F22. PODOCARPACEAE

2 Genera, 2 species

*Afrocarpus usambarensis* (Pilg.) C.N.Page – Habit: Tree. Habitat: Montane forest, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 540 (EA). Endangered.

Podocarpus latifolius (Thunb.) R.Br. ex Mirb. – Habit: Tree. Habitat: Upland rainforest, 1550–2170 m. Vouchers: Watuma BM W0309 (EA, HIB), Wakanene KM & Mwangangi OM 101, Bytebier B 2329, Faden RB et al. NMK Exped. 84 & 313, Drummond RB & Hemsley HJ 4353 (EA).

## Part 5. Liliopsida

## F23. AMARYLLIDACEAE

3 Genera, 3 species

- Cryptostephanus haemanthoides Pax Habit: Herb. Habitat: Evergreen woodland, deciduous bushland on granitic rocks, 720–1250 m. Vouchers: SAJIT–005364 (EA, HIB), Luke WRQ et al. 5523 & 6424, Faden RB & Faden AJ 74/252, Bjørnstad A 270, Ossent J 165, Hildebrandt JM 2578 (EA).
- Cyrtanthus sanguineus (Lindl.) Walp. subsp. wakefieldii (Sealy) Nordal Habit: Herb. Habitat: Sandy soils in deciduous woodland, rocky slopes, ca. 1000 m. Vouchers: Faden RB et al. 69/444, Archer PG 564 (EA).
- Scadoxus multiflorus (Martyn) Raf. subsp. multiflorus Habit: Herb. Habitat: Montane forest undergrowth, 1400–1763 m. Vouchers: Watuma BM W0025 & W0051 (EA, HIB), Faden RB et al. NMK Exped. 48, Faden RB et al. 71/216 (EA).

## F24. ARACEAE

4 Genera, 4 species

- Culcasia falcifolia Engl. Habit: Climber. Habitat: Moist evergreen forest, 1425–1875 m. Vouchers: Watuma BM W0124 (EA, HIB), Joanna B 8774, NMK Taita Hills Exped. 260, Gardner HM 3009 (EA).
- Stylochaeton salaamicum N.E.Br. Habit: Herb. Habitat: Lowland evergreen forest, wooded grassland, 700–1000 m. Vouchers: Mwachala G et al. EW1357, Faden RB, Evans A & Githui M 70/155 (EA).
- Wolffia arrhiza (L.) Horkel ex Wimm. Habit: Herb. Habitat: Ditches and pools, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 1052 (EA).
- Zamioculcas zamiifolia (G.Lodd.) Engl. Habit: Herb. Habitat: Humid to dry evergreen forest, often on rocks, 900–1100 m. Voucher: Faden RB & Faden AJ 71/956 (EA).

## F25. ARECACEAE

1 Genus, 1 species

*Phoenix reclinata* Jacq. – Habit: Tree. Habitat: Disturbed forest sites, open rocky hillsides, 1000–1850 m. Vouchers: Watuma BM W0137 (EA, HIB), Drummond RB & Hemsley JH 4369 (EA), Raler I 0019 (EA), Faden RB et al. 71/242 (EA).

## F26. ASPARAGACEAE

5 Genera, 26 species

*Albuca abyssinica* Jacq. – Habit: Herb. Habitat: Forest, soils on rocks and inselbergs, ca. 1794 m. Voucher: SAJIT–004520 (EA, HIB).

- Albuca donaldsonii Rendle Habit: Herb. Habitat: Deciduous bushland, grassland, ca. 862 m. Vouchers: SAJIT–004623 (EA, HIB), Polhill RM & Kibuwa SP 954 (EA).
- *Albuca virens* (Lindl.) J.C.Manning & Goldblatt subsp. *virens* Habit: Herb. Habitat: Bushland, woodland and woodland edges, 800–1000 m. Voucher: SA-JIT–005366 (EA, HIB).
- Asparagus asparagoides (L.) Druce Habit: Climber. Habitat: Mist forest remnants, forest on basement complex, 1440–2170 m. Vouchers: SAJIT–004517 & 006371 (EA, HIB), Wakanene KM & Mwangangi OM 686, Beentje HJ et al. NMK Exped. 103 & 368, Joanna B 9024, Drummond RB & Hemsley JH 4322, Faden RB et al. 70/533, Gillett JB, Burtt BL & Osborn RM 1712 (EA).
- Asparagus buchananii Baker Habit: Climber. Habitat: Dry bushland, woodland, grassland, ca. 960 m. Vouchers: SAJIT-005380 (EA, HIB), Bally JB 13528 (EA).
- Asparagus falcatus L. Habit: Climber. Habitat: Dry forest margins, deciduous or evergreen bushland, 500–1610 m. Vouchers: Watuma BM W0272 (EA, HIB), Mwachala G et al. EW184, Drummond RB & Hemsley JH 4272, Bally JB 13408 (EA).
- Asparagus flagellaris (Kunth) Baker Habit: Shrub. Habitat: Wooded grassland, dry bushland, regularly burned areas. Vouchers: Hucks M 450, Bally PRO 232 (EA).
- Asparagus racemosus Willd. Habit: Climber/Shrub. Habitat: Forest margins, wooded grassland, secondary bushland, ca. 856 m. Vouchers: SAJIT–006417, Watuma BM W0082 (EA, HIB), Medley KE 1002 (EA).
- Asparagus setaceus (Kunth) Jessop Habit: Climber/Shrub. Habitat: Forest and forest margins, 900–1875 m. Vouchers: Wakanene KM & Mwangangi OM 346, Mwachala G et al. EW820, Mungai GM et al. EW3198, Faden RB et al. NMK Exped. 211 & 436, Medley KE 991, Christenhusz MJM et al. 6623 (EA).
- *Chlorophytum andongense* Baker Habit: Herb. Habitat: Open woodland, forest margins, riverine thicket, termite mounds, ca. 930 m. Vouchers: Polhill RM & Kibuwa SP 975, Bally 12699A (EA).
- Chlorophytum comosum (Thunb.) Jacques Habit: Herb. Habitat: Undergrowth in rainforest, riverine, woodlands, 859–1850 m. Vouchers: SAJIT–005333 & 006415, Watuma BM W0020 (EA, HIB), Beentje HJ et al. NMK Exped. 357, Drummond RB & Hemsley JH 4335, Faden RB et al. 70/750 (EA).
- *Chlorophytum sparsiflorum* Baker Habit: Herb. Habitat: Moist clearings in forest, forest margins, 1425–1850 m. Vouchers: Beentje HJ et al. NMK Exped. 949, Drummond RB & Hemsley JH 4335 (EA).
- *Chlorophytum suffruticosum* Baker Habit: Herb. Habitat: Rocky wooded bushland, 800–1100 m. Voucher: SAJIT–005363 (EA, HIB).
- *Chlorophytum tuberosum* (Roxb.) Baker Habit: Herb. Habitat: Woodland, bushland, seasonally flooded areas, 487–1000 m. Vouchers: Mwachala G et al. EW026, Greenway PJ & Kanuri 12718, Rauh W 12471 (EA).
- Dracaena arborescens (Cornu ex Gérôme & Labroy) Byng & Christenh. Habit: Herb. Habitat: Evergreen bushland, ca. 548 m. Voucher: Bally PRO 8651 (EA).
- *Dracaena afromontana* Mildbr. Habit: Tree. Habitat: Understorey in rainforest, 1740–2203 m. Vouchers: SAJIT–006362 (EA, HIB), Christenhusz MJM et al.

- 6646 (EA), Beentje HJ et al. NMK Exped. 915, Faden RB et al. NMK Exped. 1130, Kimeu JM et al. KEFRI 502 (EA).
- *Dracaena fragrans* (L.) Ker Gawl. Habit: Tree. Habitat: Moist forest near streams, 1300–1875 m. Vouchers: SAJIT–004604 (EA, HIB), Luke WRQ & Luke PA 4166, Faden RB et al. NMK Exped. 199 & 1049, Luke WRQ et al. 5348, Gardner HM 3014, Dale IR 3766 (EA).
- *Dracaena laxissima* Engl. Habit: Shrub. Habitat: Moist and riverine forests, dry forest near water, 1200–1800 m. Vouchers: Beentje HJ et al. NMK Exped. 1076, Beentje HJ 2149, Faden RB & Faden AJ 72/268, Raler I 0017, Breteler FJ 7507, Bally PRO 8702, Battiscombe E 860, Gardner HM 11415 (EA).
- *Dracaena parva* N.E.Br. Byng & Christenh. Habit: Herb. Habitat: Dry forest, rocky bushland, termite hills, 600–1371 m. Vouchers: Joanna B 8898, Bally PRO 13416 (EA).
- *Dracaena powellii* N.E.Br. Byng & Christenh. Habit: Herb. Habitat: Dry bushland, scattered tree grassland, 590–700 m. Voucher: Faden RB, Evans A & Rathbun G 69/403A (EA).
- *Dracaena raffillii* N.E.Br. Byng & Christenh. Habit: Herb. Habitat: Dry forest, woodland, bushland, ca. 1010 m. Voucher: Mwachala G et al. EW1858 (EA).
- Dracaena serpenta Byng & Christenh. var. humbertiana (Guillaumin) Byng & Christenh. Habit: Herb. Habitat: Dry bushland in rocky sites, thicket, ca. 600 m. Voucher: Bally PRO 13416 (EA).
- Dracaena singularis (N.E.Br.) Byng & Christenh.— Habit: Herb. Habitat: Dry bushland. Vouchers: Powell 10, Pfenning 1019 (EA).
- *Dracaena steudneri* Engl. Habit: Tree. Habitat: Moist or dry forest margins, 1000–1640 m. Vouchers: Watuma BM W0128 (EA, HIB), Faden RB et al. 69/459, Medley KEM p.r. (EA).
- *Dracaena volkensii* Gürke Byng & Christenh. Habit: Herb. Habitat: *Acacia-Commiphora-Euphorbia* bushland, 600–800 m. Vouchers: Drummond RB & Hemsley JH 4420, Bos JJ 10419 (EA).
- *Drimiopsis botryoides* Baker subsp. *botryoides* Habit: Herb. Habitat: Moist shaded thickets, ca. 840 m. Voucher: Faden RB & Faden AJ 74/505 (EA).

#### F27. ASPHODELACEAE

2 Genera, 10 species

- Aloe ballyi Reynolds Habit: Shrub. Habitat: Deciduous bushland & Acacia with succulents, 609–865 m. Vouchers: Bally PRO 8115, Mrs Robertson SA 3589, Reynolds GW 6378 (EA). Endangered.
- NE Aloe classenii Reynolds Habit: Herb. Habitat: Rocky outcrops in deciduous bushland, ca. 792 m. Vouchers: Archer PG 565 & 566 (EA). Critically Endangered.
- Aloe deserti A.Berger Habit: Shrub. Habitat: Deciduous bushland edges on sandy soils, 548–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 589, Bally PRO 8652 & 13571 (EA). Near Threatened.

- Aloe lateritia Engl. var. lateritia Habit: Herb. Habitat: Rocky places, grassy hill-sides, 1500–1250 m. Vouchers: Faden RB et al. NMK Exped. 21 & 293, Drummond RB & Hemsley JH 4289, Bally PRO 8790 (EA).
- NE Aloe penduliflora Baker Habit: Shrub. Habitat: Rocky slabs, deciduous dry forest, thick bush edges, 700–1640 m. Vouchers: Luke WRQ et al. 5400, Luke WRQ & Luke PA 9439, Faden RB et al. NMK Exped. 21, Newton LE 3543 & 3241, Bally PRO 13303, Gillett JB 18739, Chase s.n. (EA). Endangered.
- Aloe rabaiensis Rendle Habit: Shrub. Habitat: Woodland, open bushland and sandy soil, ca. 1600 m. Voucher: Beentje HJ et al. NMK Exped. 1136 (EA).
- *Aloe ruspoliana* Baker Habit: Herb. Deciduous bushland on sandy and rocky soils, ca. 600 m. Voucher: Bally PRO 8791 (EA).
- Aloe secundiflora Engl. Habit: Herb. Habitat: Open deciduous woodland. Vouchers: Rauh W Ke871, Reynolds 6374 (EA).
- Aloe volkensii Engl. Habit: Shrub. Habitat: Dry forest on steep slopes, dense riverine woodland, ca. 1200 m. Vouchers: Luke WRQ et al. 5513, Bally PRO 12713 (EA). Near Threatened.
- *Kniphofia thomsonii* Baker Habit: Herb. Habitat: Montane bushland and grassland on watercourse edges, 2000–2195 m. Vouchers: SAJIT–006378 (EA, HIB), Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J 6651, Faden RB et al. NMK Exped. 93, Verdcourt B & Polhill RM 2719 (EA), Gardner HM (EA).

## F28. BURMANNIACEAE

1 Genus, 1 species

NE Gymnosiphon usambaricus Engl. – Habit: Herb. Habit: Evergreen forest floor among leaf mould, 1300–1900 m. Vouchers: SAJIT–003290 (EA, HIB), Luke WRQ & Luke PA 4136, Bytebier B 1200 & 1217, Faden RB et al. NMK Exped. 484, Faden RB et al. 71/9, 50 & 155, Gillett JB et al 17141 & 18759, Bally PRO 8747 (EA). Endangered.

## F29. COLCHICACEAE

1 Genus, 1 species

Gloriosa superba L. – Habit: Climber. Habitat: Rainforest, forest edges and glades, open *Acacia-Commiphora* woodland, 1000–1875 m. Vouchers: Mungai G et al. EW2821, Faden RB et al. NMK Exped. 590, Verdcourt B & Polhill RM 2745 (EA).

## F30. COMMELINACEAE

4 Genera, 13 species

- Aneilema aequinoctiale (P.Beauv.) G.Don Habit: Herb. Habitat: Moist forest undergrowth and edges, 1500–1875 m. Vouchers: Faden RB et al. 69/839, Faden RB et al. NMK Exped. 245 (EA).
- *Aneilema hockii* De Wild. Habit: Herb. Habitat: Deciduous bushland, grassland, 520–1180 m. Vouchers: Mwachala G et al. EW242, Faden RB et al. 74/502 (EA).

- Aneilema johnstonii K.Schum. Habit: Herb. Habitat: Acacia-Commiphora woodland, scrub, 985–1100 m. Vouchers: Mwachala G et al. EW229, Faden RB, Evans A & Siggins 69/323, Faden RB et al. 74/490 (EA).
- Aneilema leiocaule K.Schum. Habit: Herb. Habitat: Upland forest, shaded areas near streams, 1530–2170 m. Vouchers: Faden RB et al. NMK Exped. 78, Beentje HJ et al. NMK Exped. 904, Faden RB et al. 70/485, Gillett JB, Burtt BL & Osborn 17077 (EA).
- Commelina africana L. var. villosior (C.B.Clarke) Brenan Habit: Herb. Habitat: Forest undergrowth and edges, woodland, grassland, roadside banks, cultivated lands, 2000–2200 m. Voucher: Faden RB et al. 70/497 (EA).
- Commelina benghalensis L. Habit: Herb. Habitat: Forest, forest edges and clearings, disturbed areas, weed of cultivation, 1400–1640 m. Voucher: Faden RB et al. NMK Exped. 23 (EA).
- Commelina bracteosa Hassk. Habit: Herb. Habitat: Forest edge, moist thickets, woodland, grassland, bushland, cultivated grounds, 590–700 m. Voucher: Faden RB, Evans A & Rathbun G 69/409 (EA).
- Commelina latifolia Hochst. ex A.Rich. Habit: Herb. Habitat: Forest and thicket edges, disturbed places, roadsides, weed in cultivated lands, 1240–1830 m. Vouchers: Mungai GM et al. EW2813, Faden RB & Faden AJ 77/317 (EA).
- Commelina lukei Faden Habit: Herb. Habitat: Forest edges and clearings, moist thickets, bushland, grassland, roadsides, 680–750 m. Vouchers: Faden RB, Evans A & Rathbun G 69/412, Faden RB et al. 70/149 (EA).
- Cyanotis arachnoidea C.B.Clarke Habit: Herb. Habitat: Rock crevices, exposed rock faces over shallow soil on hilltops, 1700–2100 m. Vouchers: Watuma BM W0111 (EA, HIB), Kabuye CHS 82/62, Faden RB & Faden AJ 77/316, Faden RB et al. NMK Exped. 256, Drummond RB & Hemsley JH 4301, Bally PRO 13635 (EA).
- *Cyanotis lanata* Benth. Habit: Herb. Habitat: Rock outcrops in open grasslands, bushlands and woodlands, ca. 850 m. Vouchers: Mwachala G et al. EW175 & 754 (EA).
- *Murdannia semiteres* (Dalzell) Santapau Habit: Herb. Habitat: Mist forest near on rocky outcrops, ca. 1603 m. Voucher: Watuma BM W0223 (EA, HIB).
- Murdannia simplex (Vahl) Brenan Habit: Herb. Habitat: Rocky outcrops, forest clearings, woodland, grassland, 1676–1838 m. Vouchers: Watuma BM W0108 & W0262 (EA, HIB), Kabuye CHS et al. NMK Exped. 813, Faden RB & Faden AJ 77/315 (EA).

#### F31. CYPERACEAE

9 Genera, 42 species

- Abildgaardia ovata (Burm.f.) Kral Habit: Herb. Habitat: Hilltop grasslands, wooded grassland, grazed fallow areas, ca. 1100 m. Voucher: Sacleux C 2560 (EA).
- Bulbostylis coleotricha (Hochst. ex A.Rich.) C.B.Clarke var. coleotricha Habit: Herb. Habitat: Shallow soil overlaying rock outcrops and crevices, 800–1050 m. Vouchers: Mwachala G et al. EW586 & 3297 (EA).

- Bulbostylis hensii (C.B.Clarke) R.W.Haines Habit: Herb. Habitat: Dry grassland in hilly areas, roadside banks, 1400–1600 m. Voucher: Kabuye CHS 82/108 (EA).
- *Bulbostylis hispidula* (Vahl) R.W.Haines subsp. *filiformis* (C.B.Clarke) R.W.Haines Habit: Herb. Habitat: Grassland, *Acacia* scrub, roadsides, seasonal pools and wet rock crevices, ca. 500 m. Vouchers: Muasya AM 2091, 2092 & 2093 (EA).
- Bulbostylis hispidula (Vahl) R.W.Haines subsp. halophila (Lye) R.W.Haines
   Habit: Herb. Habitat: Short grasslands, abandoned cultivations, ca. 850 m.
   Voucher: Gillett JB & Napper DM 2170 (EA). Endangered.
- Bulbostylis hispidula (Vahl) R.W.Haines subsp. hispidula Habit: Herb. Habitat: Grassland with scattered trees, shrubs, roadside, seasonally water-logged soils, 1030–1875 m. Vouchers: Mwachala G et al. EW809, Beentje HJ et al. NMK Exped. 229 & 433 (EA).
- Bulbostylis hispidula (Vahl) R.W.Haines subsp. pyriformis (Lye) R.W.Haines Habit: Herb. Habitat: Open Commiphora-Acacia-Sterculia-Delonix-Euphorbia scrub, ca. 564 m. Voucher: Polhill RM & Kibuwa SP 953 (EA).
- Carex castanostachya K.Schum. ex Kük. Habit: Herb. Habitat: Intermediate wet evergreen forest, 1500–1850 m. Vouchers: Faden RB & Githui M 70/736, Luke WRQ et al. 4190 (EA).
- *Coleochloa abyssinica* (Hochst. ex A.Rich.) Gilly Habit: Herb. Habitat: Wet rock surfaces, hilly grasslands, ca. 1295 m. Voucher: Mungai GM et al. 3091A (EA).
- *Coleochloa setifera* (Ridl.) Gilly Habit: Herb. Habitat: Shallow soil overlaying rocky outcrops and crevices, 610–700 m. Vouchers: Luke WRQ et al. 4172, Polhill RM & Kibuwa SP 947 (EA).
- *Cyperus alternifolius* L. subsp. *flabelliformis* Kük. Habit: Herb. Habitat: Streambanks, swampy areas, 950–1371 m. Vouchers: Kabuye CHS 82/31, Mwachala G et al. EW237 & 2808 (EA).
- Cyperus amabilis Vahl Habit: Herb. Habitat: Seasonally wet habitats, ca. 500 m. Voucher: Muasya AM 2089 (EA).
- Cyperus amauropus Steud. Habit: Herb. Habitat: Grassland and wooded grassland on rocky slopes, 500–579 m. Vouchers: Verdcourt B & Polhill RM 2713, Greenway PJ & Kanuri K 12802, Muasya AM 2095 & 2102 (EA).
- *Cyperus bulbosus* Vahl Habit: Herb. Habitat: Open grassy places in mist forest, ca. 1873 m. Vouchers: SAJIT–003297 (EA, HIB), Fleuret A 25 (EA).
- Cyperus cyperoides (L.) Kuntze Habit: Herb. Habitat: Forest clearings, path sides, grassland, woodland, stream sides, 1040–1100 m. Vouchers: Mwachala G et al. EW239 & 600 (EA).
- Cyperus difformis L. Habit: Herb. Habitat: Temporary pools, seasonally wet grasslands, along water edges, roadside ditches, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 704 (EA).
- Cyperus distans L.f Habit: Herb. Habitat: Forest margins, moist shaded bushland, woodland, forest zones, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 711 (EA).

- Cyperus dubius Rottb. var. macrocephalus (C.B.Clarke) Kük. Habit: Herb. Habitat: Forest margins and clearings, riverine, dry bushland, grassland, thin soils over rock, 850–1875 m. Vouchers: Mwachala G et al. EW154, Mbale M et al. NMK 965, Muasya AM 2100, Faden RB et al. NMK Exped. 496, Verdcourt B 2741 (EA).
- Cyperus elegantulus Steud. Habit: Herb. Habitat: Wet forest margins, grasslands and riverine margins. Voucher: Kirika P et al. 01/2006/17 (EA).
- Cyperus ferrugineoviridis (C.B.Clarke) Kük. Habit: Herb. Habitat: Grassland and forest clearings, weed of cultivated lands, 900–1050 m. Voucher: Mwachala G et al. EW602 (EA).
- *Cyperus fischerianus* G.W.Schimp. ex A.Rich. Habit: Herb. Habitat: Forest, secondary areas in forest zone, stream sides, 998–1400 m. Voucher: Mwachala G et al. EW153 & 993, Mungai GM et al. EW3104/A (EA).
- Cyperus glaucophyllus Boeckeler Habit: Herb. Habitat: Forest, secondary areas in forest zone, stream sides, 1425–1850 m. Voucher: Beentje HJ et al. NMK Exped. 429 (EA).
- Cyperus grandibulbosus C.B.Clarke Habit: Herb. Habitat: Seasonally wet habitats, wooded grasslands and grasslands, 487–600 m. Vouchers: Hucks M 575, Greenway PJ & Kanuri K 12716, Scott-Elliot 6284 (EA).
- Cuperus hemisphaericus Boeckeler Habit: Herb. Habitat: Open and wooded grassland, ca. 1626 m. Voucher: Kirika P et al. 01/2006/32 (EA).
- Cyperus hortensis (Salzm. ex Steud.) Dorr Habit. Herb. Habitat: Riverine, 800–1750 m. Vouchers: Kabuye CHS et al. NMK Exped. 709, Wakanene KM & Mwangangi OM 607 (EA).
- Cyperus latifolius Poir. Habit: Herb. Habitat: Swampy areas, roadside ditches and stream sides, 600–1350 m. Vouchers: Kabuye CHS 82/1, McDonald J 840, Bally B 13597 (EA).
- *Cyperus longus* L. subsp. *longus* Habit: Herb. Habitat: Temporary pools in grassland and bushland, ca. 500 m. Voucher: Faden RB, Faden AJ & Holland P 72/151 (EA).
- Cyperus maranguensis K.Schum. Habit: Herb. Habitat: Grassland, swampy grassland, weed of cultivation, roadsides, 1404–1875 m. Vouchers: Mbale M et al. NMK 963, Beentje HJ et al. NMK Exped. 431 & 585, Gilbert M & Gilbert C 6108 (EA).
- Cyperus microstylus (C.B.Clarke) Mattf. & Kük. Habit: Herb. Habitat: Shallow soil over rock, bushland, scattered tree grassland, 840–1020 m. Vouchers: Mbale M, Muthoka P, Chesire C & Hay F NMK 972, Faden RB & Faden AJ 74/510 (EA).
- Cyperus mollipes (C.B.Clarke) K.Schum. Habit: Herb. Habitat: Grassland, open woodland, bushed grassland, ca. 450–600 m. Vouchers: Muasya AM 2086, 2103 & 2107 (EA).
- Cyperus pectinatus Vahl Habit: Herb. Habitat: Floating on shallow waters, ca. 1573 m. Voucher: Mbale M et al. NMK 969 (EA).

- Cyperus plateilema (Steud.) Kük. Habit: Herb. Habitat: Roadsides in rainforest, montane grassland, swampy sides, stream banks, 1400–1640 m. Vouchers: Kabuye CHS 82/52, Faden RB et al. NMK Exped. 18 (EA).
- Cyperus purpureoviridis Lye Habit: Herb. Habitat: Montane forests, steep rocky slopes, swampy habitats edges, ca. 1573 m. Voucher: Mbale M et al. NMK 971 (EA). Near Threatened.
- *Cyperus richardii* Steud. Habit: Herb. Habitat: Grassland in damp sites, roadsides, ca. 1515 m. Voucher: Mbale M, Muthoka P, Chesire C & Hay F NMK 966 (EA).
- *Cyperus rohlfsii* Boeckeler Habit: Herb. Habitat: Rocky outcrops, scattered tree grassland, 610–1326 m. Vouchers: Mbale M et al. NMK 959, Polhill RM & Kibuwa SP 946 (EA).
- Cyperus rotundus L. Habit: Herb. Habitat: Forest glades, damp sites, riverbanks, ca. 998 m. Voucher: Mwachala G et al. EW116 (EA).
- Cyperus rubicundus Vahl Habit: Herb. Habitat: Seasonally wet habitats, temporary pools or swamps, 453–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 596, Muasya AM 2106 (EA).
- Cyperus schimperianus Steud. Habit: Herb. Habitat: Sandy or stony riverbanks, ca. 450 m. Voucher: Faden RB, Faden AJ & Holland P 72/145 (EA).
- NE Cyperus scott-elliotii Govaerts Habit: Herb. Habitat: Shallow soil over rock, swampy grassland, ca. 500 m. Voucher: Muasya AM et al. 2090 (EA).
- Cyperus sesquiflorus (Torr.) Mattf. & Kük. subsp. sesquiflorus Habit: Herb. Habitat: Open forest, forest margins, open grassland, 1371–2103 m. Vouchers: Kabuye CHS 82/26, Osborn RM 8, Joanna B 8817 (EA).
- *Eleocharis atropurpurea* (Retz.) J.Presl & C.Presl Habit: Herb. Habitat: Seasonal pools and seepage areas, ca. 500 m. Voucher: Faden RB, Faden AJ & Holland P 72/149 (EA).
- *Fimbristylis dichotoma* (L.) Vahl Habit: Herb. Habitat: Riverbanks, grasslands, cultivated areas, 950–1371 m. Vouchers: Watuma BM W0249 (EA, HIB), Kabuye CHS 82/22, Mwachala G et al. EW770 (EA).
- Fuirena pubescens (Poir.) Kunth var. pubescens Habit: Herb. Habitat: Seasonally wet grasslands, swamp and stream edges, ca. 1150 m. Voucher: Mwachala G et al. EW3551 (EA).
- *Fuirena stricta* Steud. subsp. *chlorocarpa* (Ridl.) Lye Habit: Herb. Habitat: Seasonally wet grasslands, swamp and stream edges, 1371 m. Voucher: Kabuye CHS 82/23 (EA).
- Scleria lithosperma (L.) Sw. Habit: Herb. Habitat: Shady and open places in evergreen forest, 1030–1150 m. Vouchers: Mwachala G et al. EW607 & 792 (EA).

## F32. DIOSCOREACEAE

1 Genus, 1 species

*Dioscorea asteriscus* Burkill – Habit: Climber. Habitat: Rain-forest, dry evergreen forest, forest edges, 1425–1850 m. Voucher: Beentje HJ et al. NMK Exped. 1098 (EA).

# F33. HYPOXIDACEAE

1 Genus, 3 species

- *Hypoxis schimperi* Baker Habit: Herb. Habitat: Grassland, swampy grassland, ca. 2050 m. Voucher: Gillett JB 17261 (EA).
- *Hypoxis rigidula* Baker Habit: Herb. Habitat: Open grassland or woodland. Voucher: Joanna B 9023 (EA).
- *Hypoxis urceolata* Nel Habit: Herb. Habitat: Open bushland, disturbed woodland, grassland, 600–800 m. Voucher: Hildebrandt JM 2542 (EA).

#### F34. IRIDACEAE

1 Genus, 4 species

- *Gladiolus candidus* (Rendle) Goldblatt Habit: Herb. Habitat: Moist highlands in rock outcrops, woodland and bushland, 610–1000 m. Vouchers: Sacleux CJ 2279, Johnston HH s.n. (EA).
- *Gladiolus dalenii* Van Geel subsp. *dalenii* Habit: Herb. Habitat: Open grassland on rocky outcrops, 1800–1850 m. Voucher: Watuma BM W0066 (EA, HIB).
- NE Gladiolus rupicola Vaupel Habit: Herb. Habitat: Mountains in grasslands or in rocky outcrops, 1280–2230 m. Vouchers: Lavranos JJ & Newton 17640, Dale IR 3802, Gardner HM 2957 (EA).
- NE Gladiolus usambarensis Marais ex Goldblatt Habit: Herb. Habitat: Montane habitats, rocky sites and cliffs, ca. 1219 m. Vouchers: Archer PG 547, Bally PRO 13579, Joanna B 8840 (EA). Near Threatened.

#### F35. MUSACEAE

1 Genus, 1 species

*Ensete ventricosum* (Welw.) Cheesman – Habit: Herb. Habitat: Upland evergreen forests, ravines, riverbanks, drier lowland forests, 1000–2100 m. Vouchers: Faden RB et al. NMK Exped. 456, Medley p.r. (EA).

#### F36. ORCHIDACEAE

27 Genera, 69 species

- Aerangis confusa J.Stewart Habit: Herb. Habitat: Forest, dry forest and bush, woodland, ca. 1180 m. Voucher: Mungai GM et al. EW240 (EA).
- Aerangis kotschyana (Rchb.f.) Schltr. Habit: Herb. Habitat: Forest, woodland, humid wooded grassland, ca. 1050 m. Vouchers: Mungai GM et al. EW1660 (EA).
- Aerangis somalensis (Schltr.) Schltr. Habit: Herb. Habitat: Woodland along streams, 700–969 m. Vouchers: van der Laan FM 419 (EA), van der Laan FM & Wubben JM 1286 (WAG), Piers F s.n. (K).

- Aerangis thomsonii (Rolfe) Schltr. Habit: Herb. Habitat: Montane forest, 1818–2200 m. Vouchers: SAJIT–004538 (EA, HIB), Osborn RM 15 (EA).
- Angraecum eburneum Bory subsp. giryamae (Rendle) Senghas & P.J.Cribb Habit: Herb. Habitat: On trees and rocks in forest, ca. 929 m. Vouchers: Archer PG 605, Mr. & Mrs. Stewart DRM 1292, Wakefield TG & Grant s.n. (EA).
- Angraecum sacciferum Lindl. Habit: Herb. Habitat: Dense mist forest, 1480–1875 m. Vouchers: SAJIT–004163 (EA, HIB), Bytebier B 1148 & 1189, Faden RB et al. NMK Exped. 457, Luke WRQ & Luke PA 4155 (EA).
- Angraecum cf. sacciferum Lindl. Habit: Herb. Habitat: High epiphyte in montane evergreen forest, 1650–1800 m. Voucher: Faden RB et al. 72/205 (EA).
- Ansellia africana Lindl. Habit: Herb. Habitat: Dense mist forest, ca. 1524 m. Voucher: van Someren CGR 827 (EA). Vulnerable.
- *Brachycorythis pleistophylla* Rchb.f. var. *pleistophylla* Habit: Herb. Habitat: Deciduous woodland edges, glades in forest, ca. 1325 m. Vouchers: Faden RB et al. 71/987, Joanna B 8919, van Someren CGR 115 (EA).
- *Bolusiella iridifolia* (Rolfe) Schltr. subsp. *iridifolia* Habit: Herb. Habitat: Forest and savannah trees, ca. 1600 m. Voucher: Bytebier B 1188 (BR, EA).
- **Bulbophyllum intertextum Lindl.** Habit: Herb. Habitat: Intermediate to montane evergreen forest, mist forest, 1640–1730 m. Vouchers: Faden RB & Faden AJ 72/263, Faden RB et al. 70/778, Bytebier B 1211 & 1324 (EA).
- *Bulbophyllum josephi* (Kuntze) Summerh. var. *josephi* Habit: Herb. Habitat: Mist forest, 1560–1640 m. Vouchers: Luke WRQ & Luke PA 4163, Bytebier B 1210, Faden RB, Evans A & Smeenk C 70/565 (EA).
- Calanthe sylvatica (Thouars) Lindl. Habit: Herb. Habitat: Riverine forest, 1425–1850 m. Vouchers: Beentje HJ et al. NMK Exped. 995 (EA), Faden RB et al. NMK Exped. 764 (EA).
- *Cheirostylis lepida* (Rchb.f.) Rolfe Habit: Herb. Habitat: Forest floor in leaf mounds, 1440–1680 m. Vouchers: SAJIT–004267 (EA, HIB), Faden RB, Evans A, Smeenk C 70/545, Bytebier B 1678 (EA).
- NE Cynorkis buchwaldiana Kraenzl. subsp. braunii (Kraenzl.) Summerh. Habit: Herb. Habitat: Montane forest in open grassland, heath zone, 1643–2195 m. Vouchers: Wakanene KM & Mwangangi OM 636, Beentje HJ et al. NMK Exped. 859, Bytebier B 1661 & 1675, Dale IR 3778, Archer PG 571 & 725, Napper DM et al. 2166, Gardiner N s.n. (EA). Near Threatened.
- NE Cynorkis uncata (Rolfe) Kraenzl. Habit: Herb. Habitat: Secondary forest in humus layer, 1400–1850 m. Vouchers: SAJIT–005324 (EA, HIB), Mwachala G et al. EW3573, Wakanene KM & Mwangangi OM 360, Beentje HJ et al. NMK Exped. 997 & 1067, Faden RB & Faden AJ 72/260, Bytebier B 1153, 1161 & 1753, Archer PG 611, Campbell H s.n. (EA). Vulnerable.
- *Cyrtorchis arcuata* (Lindl.) Schltr. Habit: Herb. Habitat: Forest, woodland, bushland on trees and rocks, ca. 1050 m. Voucher: Mungai GM et al. EW1661 (EA).
- *Diaphananthe fragrantissima* (Rchb.f.) Schltr. Habit: Herb. Habitat: Forest, gallery forests, 868–900 m. Voucher: Archer PG 603 (EA).

- *Diaphananthe lorifolia* Summerh. Habit: Herb. Habitat: In montane and riverine forest. No voucher seen. Recorded in *Orchids of Kenya* (Stewart and Campbell 1996).
- *Diaphananthe odoratissima* (Rchb.f.) P.J.Cribb & Carlsward Habit: Herb. Habitat: Primary and secondary forest on rocks or trees, ca. 1219 m. Voucher: Archer PG 582 (EA).
- *Disperis kilimanjarica* Rendle Habit: Herb. Habitat: Shaded evergreen forest, ca. 1700–2200 m. Voucher: SAJIT–004288 (EA, HIB).
- Disperis nemorosa Rendle Habit: Herb. Habitat: Mossy places and leaf litter on floor of evergreen and mist forest, 1730–1900 m. Vouchers: Watuma BM W0105 (EA, HIB), Bytebier B 1662, Beentje HJ 2184, Faden RB & Evans A 69/883, Dale IR 3790 (EA).
- *Disperis reichenbachiana* Welw. ex Rchb.f. Habit: Herb. Habitat: Forest epiphyte, ca. 1350–2100 m. Voucher: SAJIT–004195 (EA, HIB).
- *Eulophia mechowii* (Rchb.f.) T.Durand & Schinz Habit: Herb. Habitat: Grassland and wooded grassland, ca. 1524 m. Voucher: Gardner HM 3018 (EA).
- *Eulophia schweinfurthii* Kraenzl. Habit: Herb. Habitat: Grassland, thicket, bushland, woodland, 1220–1525 m. Voucher: Joanna B 8773 (EA).
- *Eulophia speciosa* (R.Br.) Bolus Habit: Herb. Habitat: In grassland, deciduous bushland and woodland, ca. 609 m. Voucher: Napier ER 1038 (EA).
- *Eulophia streptopetala* Lindl. var. *streptopetala* Habit: Herb. Habitat: Forest margins and grasslands, 1580–1730 m. Vouchers: Mwachala G et al. 3068A, Beentje HJ 2185 (EA).
- *Eulophia streptopetala* Lindl. var. *stenophylla* (Summerh.) P.J.Cribb Habit: Herb. Habitat: Shade of bushes, open grasslands, rocky hillsides, 1430–2000 m. Vouchers: SAJIT–004582 (EA, HIB), Friis I & Hansen OJ 2685, Bally PRO 8703, 8772 & 8779 (EA).
- *Eulophia taitensis* Pfennig & P.J.Cribb Habit: Herb. Habitat: *Acacia* thicket on sandy soils, woodland, 1000–1348 m. Vouchers: Watuma BM W0235 (EA, HIB), Pfennig H 1113, Meyer H 1432 (EA).
- Habenaria huillensis Rchb.f. Habit: Herb. Habitat: Grassland without trees, rock crevices on basement complex, 1643–2110 m. Vouchers: SAJIT–004551, 006407 & 006412 (EA, HIB), Gillett JB, Burtt BL & Osborn RM 17079, Archer PG 581 (EA).
- *Habenaria humilior* Rchb.f. Habit: Herb. Habitat: Short grassland over rocks, ca. 1219 m. Voucher: Napier ER 1144 (EA).
- Habenaria ndiana Rendle Habit: Herb. Habitat: In *Themeda*, *Hyparrhenia* grassland, with or without *Acacia* or *Combretum* scrub, ca. 1000 m. Voucher: Gregory s.n. (BM).
- Habenaria peristyloides A.Rich. Habit: Herb. Habitat: Short upland grassland, open scrub, ca. 1850 m. Voucher: SAJIT–006369 (EA, HIB).
- *Habenaria thomsonii* Rchb.f. Habit: Herb. Habitat: Forest edge, among rocks, swampy grassland. Voucher: Bally PRO 13638 (EA).

- *Microcoelia corallina* Summerh. Habit: Herb. Habitat: Mixed woodland near river. Voucher: Luke WRQ & Luke PA 5572 (K).
- *Microcoelia exilis* Lindl. Habit: Herb. Habitat: Riverine forest, woodland, secondary forest, plantations, 670–945 m. Vouchers: Faden RB & Faden AJ 74/470, Faden RB, Evans A & Rathbun G 69/410, Archer PG 624 (EA).
- *Microcoelia globulosa* (Hochst.) L.Jonss. Habit: Herb. Habitat: Margins of evergreen forest, relict rainforest forest, riverine forest, ca. 1180 m. Voucher: Mwachala G et al. EW245 (EA).
- *Microcoelia obovata* Summerh. Habit: Herb. Habitat: Woodland, wooded grassland, riverine forest, ca. 1097 m. Voucher: Archer PG 660 (EA).
- NE Microcoelia smithii (Rolfe) Summerh. Habit: Herb. Habitat: Dry evergreen forest, ca. 540 m. Voucher: Bytebier B 424 (EA).
- *Microcoelia stolzii* (Schltr.) Summerh. Habit: Herb. Habitat: Upland rainforest, dry evergreen and riverine forest, 627–1100 m. Vouchers: Miyawa D et al. NMK 961, Faden RB, Evans A, Msafiri F 70/979 (EA).
- *Oberonia disticha* (Lam.) Schltr. Habit: Herb. Habitat: Rainforest, dry evergreen mist forest, 700–1050 m. Voucher: Faden RB, Faden AJ & Smeenk C 71/960 (EA).
- *Oeceoclades decaryana* (H.Perrier) Garay & P.Taylor Habit: Herb. Habitat: Rocky outcrop, in leaf mold under bushes, 975–1006 m. Voucher: Archer PG 530 (EA).
- *Platylepis glandulosa* (Lindl.) Rchb.f. Habit: Herb. Habitat: Rocks in forest, shady, marshy places on river banks, 1200–1300 m. Vouchers: Faden RB et al. 70/522a & 72/258 (EA).
- *Polystachya albescens* Ridl. subsp. *kraenzlinii* (Rolfe) Summerh. Habit: Herb. Habitat: Mist forest, 1219–2100 m. Voucher: Archer PG 569 (EA).
- Polystachya caespitifica Kraenzl. subsp. latilabris (Summerh.) P.J.Cribb & Podz. Habit: Herb. Habitat: Montane forest, 1490–2100 m. Vouchers: Faden RB, Evans A, Msafiri F & Smeenk C 71/57A, Faden RB et al. 70/776, Friis I & Hansen OJ 2678 (EA). Vulnerable.
- *Polystachya concreta* (Jacq.) Garay & H.R.Sweet Habit: Herb. Habitat: Forest epiphyte, ca. 1097 m. Voucher: Archer PG 601 (EA).
- Polystachya cultriformis (Thouars) Lindl. ex Spreng. Habit: Herb. Habitat: Rainforest, 1425–2100 m. Vouchers: SAJIT–005328 (EA), Faden RB et al. NMK Exped. 794 & 1175, Bytebier B 1180, 1323 & 1516, Drummond RB & Hemsley JH 4388, Polhill RM & Verdcourt B 2735, Gillett JB, Burtt BL, Osborn RM 17100, Bally PRO 8793 (EA).
- *Polystachya dendrobiiflora* Rchb.f. Habit: Herb. Habitat: Growing on *Vellozia* and on rocks, *Philippia* bushland, 609–1700 m. Vouchers: SAJIT–005341, Polhill RM & Kibuwa SP 949, Faden RB et al. 71/214, van Someren C 66, Gardner HM 2904, Joanna B 8901, Bally PRO 13373, Uhlig C 1a (EA).
- Polystachya disiformis P.J.Cribb Habit: Herb. Habitat: Montane forest, 1400–1450 m. Vouchers: Luke WRQ & Luke PA 5568, Bytebier B 1155, Drummond RB & Hemsley JH 4386 (EA). Endangered.

- *Polystachya golungensis* Rchb.f. Habit: Herb. Habitat: Evergreen, riverine forest. Voucher: None. Recorded in *Orchids of Kenya* (Stewart and Campbell 1996).
- *Polystachya lindblomii* Schltr. Habit: Herb. Habitat: Dense forests and forest margins, 1350–1470 m. Vouchers: Bytebier B 1158, Seki T 85, Faden RB et al. 70/777 (EA).
- *Polystachya modesta* Rchb.f. Habit: Herb. Habitat: Riverine forest, woodland, bushland, wooded grassland, 500–700 m. Voucher: Archer PG 601 (EA, K).
- *Polystachya polychaete* Kraenzl. Habit: Herb. Habitat: Rainforest, ca. 1097 m. Voucher: Archer PG 599 (EA).
- *Polystachya spatella* Kraenzl. Habit: Herb. Habitat: Montane forest, drier woodland, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 195 (EA).
- EPolystachya teitensis P.J.Cribb Habit: Herb. Habitat: Mist forest, 800–975 m. Vouchers: Luke WRQ & Luke PA 9438A, Faden RB, Evans A & Githui M 70/166, Archer PG 612, Stewart J 1347 (EA). Endangered.
- Polystachya transvaalensis Schltr. Habit: Herb. Habitat: Upland rainforest and mist forest, 1425–2195 m. Vouchers: Bytebier B 1515, Faden RB et al. NMK Exped. 159 & 947, Verdcourt B & Polhill RM 2724, Friis I & Hansen OJ 2677, Faden RB & Faden AJ 72/254, Faden RB et al. 70/774 (EA).
- Porpax repens (Rolfe) Schuit., Y.P.Ng & H.A.Pedersen var. repens [Stolzia repens (Rolfe) Summerh.] Habit: Herb. Habitat: Mossy trunks and branches in forest, 1425–1850 m. Vouchers: SAJIT–004262 (EA, HIB), Beentje HJ et al. NMK Exped. 1020, Faden RB et al. 71/57b (EA).
- NE Rhipidoglossum leedalii (P.J.Cribb) Farminhão & Stévart [Margelliantha leedalii P.J. Cribb] Habit: Herb. Habitat: Montane or mist forest on mossy branches, ca. 1524 m. Voucher: Archer PG 548 (EA).
- *Rhipidoglossum rutilum* (Rchb.f.) Schltr. Habit: Herb. Habitat: Montane and riverine forest, 820–1000 m. Voucher: Faden RB et al. s.n. (EA).
- *Rhipidoglossum xanthopollinium* (Rchb.f.) Schltr. Habit: Herb. Habitat: Lower areas of montane forest, ca. 884 m. Voucher: Archer PG 608 (EA).
- Satyrium crassicaule Rendle Habit: Herb. Habitat: Montane forest glades, near streams, 1360–1573 m. Vouchers: Miyawa D et al. NMK 970, Mwachala G et al. EW3601 (EA).
- Solenangis wakefieldii (Rolfe) P.J.Cribb & J.Stewart Habit: Herb. Habitat: Lowland bushland, ca. 945 m. Voucher: Archer PG 625 (EA).
- Sphyrarhynchus brevilobus (Summerh.) Bytebier [Angraecopsis breviloba Summerh.] Habit: Herb. Habitat: Upland forest, light forest on hills, 807–1332 m. Vouchers: Miyawa D et al. NMK 962, Archer PG 631 (EA).
- *Tridactyle anthomaniaca* (Rchb.f.) Summerh. Habit: Herb. Habitat: Riverine and lower montane forest, ca. 914 m. Voucher: Archer PG 715 (EA).
- *Tridactyle bicaudata* (Lindl.) Schltr. Habit: Herb. Habitat: Lowland to montane forest, riverine forest, ca. 1400 m. Voucher: Bally J 8863 (EA).
- NE *Tridactyle cruciformis* Summerh. Habit: Herb. Habitat: Upland rainforest, 1440–1680 m. Vouchers: SAJIT–003294 (EA, HIB), Faden RB, Evans A, Msafiri

- F & Smeenk C 71/46, Faden RB et al. 70/568, Bytebier B 1137, 1146, 1152 & 1198 (EA). Endangered.
- *Tridactyle filifolia* (Schltr.) Schltr. Habit: Herb. Habitat: Upland rainforest, 1873 m. Voucher: SAJIT–004185 (EA, HIB).
- *Vanilla roscheri* Rchb.f. Habit: Herb. Habitat: Open evergreen scrub, 550–700 m. Vouchers: Hucks M 456, Jex-Blake M 6872 (EA).
- *Ypsilopus amaniensis* (Kraenzl.) D'haijère & Stévart Habit: Herb. Habitat: *Junipe-rus procera* montane forest, open bushland, ca. 1829 m. Vouchers: SAJIT-004125 (EA, HIB), Joanna B 9052 (EA).
- NE Ypsilopus tanneri (P.J.Cribb) D'haijère & Stévart [Tridactyle tanneri P.J. Cribb]
  Habit: Herb. Habitat: Montane evergreen forest, 1480–1641 m. Vouchers: Luke WRQ & Luke PA 4159, Bytebier B 1143, Faden RB, Faden AJ, Smeenk C, Smeenk N & McNee J 71/971, Archer PG 580 & 595 (EA). Endangered.

# F37. POACEAE

25 Genera, 47 species

- Andropogon heterantherus Stapf Habit: Herb. Habitat: Deciduous woodland and scrub, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 674 (EA).
- Andropogon schirensis Hochst. ex A.Rich. Habit: Herb. Habitat: Deciduous bushland, wooded grassland, 1425–1850 m. Voucher: Beentje HJ et al. NMK Exped. 1194 (EA).
- Aristida adscensionis L. Habit: Herb. Habitat: Dry soils and waste ground, 548–945 m. Vouchers: Kirika P et al. EW306 & 921, Kirika P et al. 2188 & 8648B (EA).
- *Aristida stenostachya* Clayton Habit: Herb. Habitat: Deciduous thicket and bushland, 485–600 m. Vouchers: Luke WRQ & Luke PA 16115, Leuthold W 122 (EA).
- Cenchrus ciliaris L. Habit: Herb. Habitat: Deciduous bushland, wooded grassland ca. 500–700 m. Vouchers: Muasya AM & Archibald S 2077, Bally PRO 8645, Greenway PJ 12631 (EA).
- Cenchrus massaicus (Stapf) Morrone Habit: Herb. Habitat: Deciduous bushland on alluvial black soils, ca. 548 m. Voucher: Bogdan A 3614 (EA).
- Cenchrus trachyphyllus (Pilg.) Morrone Habit: Herb. Habitat: Glades, semi-shaded and wet sites in rainforest, pathsides, 1550–2000 m. Vouchers: Beentje HJ et al. NMK Exped. 890 & 941 (EA).
- *Chloris gayana* Kunth Habit: Herb. Habitat: Riverine woodland, scattered tree grassland, open grassland. Voucher: Rauh W Ke951 (EA).
- \*Coix lacryma-jobi L. Habit: Herb. Habitat: Stream sides and swampy places, occasionally cultivated, 579–1350 m. Vouchers: Mwachala G et al. EW1244, Kabuye CHS 82/127, Faden RB, Evans A, Glover PE 70/459, Napier ER 998, McDonald J 864 (EA).
- *Digitaria abyssinica* (Hochst. ex A.Rich.) Stapf Habit: Herb. Habitat: Ruderal sites, grazed lands, weed of cultivated areas, 1524–1646 m. Vouchers: Mrs. Robertson SA 2179, Frowd BH 2 (EA).

- *Digitaria aridicola* Napper Habit: Herb. Habitat: Dry open deciduous bushland, ca. 600 m. Voucher: Leuthhold W 123 (EA).
- *Digitaria pearsonii* Stapf Habit: Herb. Habitat: Forest margins and open weedy places, 1400–1640 m. Vouchers: Faden RB et al. NMK Exped. 19, Mrs. Robertson SA 2182 (EA).
- *Digitaria pennata* (Hochst.) T.Cooke Habit: Herb. Habitat: Dry open deciduous bushland, ca. 487 m. Voucher: Archer PG 627 (EA).
- Digitaria rivae (Chiov.) Stapf Habit: Herb. Habitat: Acacia-Terminalia-Commiphora open bushland, 457–609 m. Greenway PJ & Kanuri K 12779 & 12796, Leuthold W 113, Sheldrick D NP21, Bogdan A 3902, FitzGerald V 4971 (EA).
- *Ehrharta erecta* Lam. Habit: Herb. Habitat: Forest glades, margins and pathsides, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 572 (EA).
- Eleusine africana Kenn.-O'Byrne Habit: Herb. Habitat: Disturbed ground, along roadsides, old cultivations, ca. 1000 m. Voucher: Mungai GM et al. EW2835 (EA).
- Enteropogon macrostachyus (Hochst. ex A.Rich.) Munro ex Benth. Habit: Herb. Habitat: Disturbed places, Acacia-Commiphora bushland, 600–950 m. Vouchers: Mwachala G et al. EW71 & 860, Kabuye CHS et al. NMK Exped. 683, Bally PRO 8648, Brown E 2139G, Frowd BH 11 (EA).
- *Enteropogon rupestris* (J.A.Schmidt) A.Chev. Habit: Herb. Habitat: Scattered tree grassland on black clay, ca. 548 m. Voucher: Bogdan A 3613 (EA).
- *Eragrostis ciliaris* (L.) R.Br. Habit: Herb. Habitat: Farmlands, clearings, overgrazed areas, trodden weedy places, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 703 (EA).
- Heteropogon contortus (L.) P.Beauv. ex Roem. & Schult. Habit: Herb. Habitat: Wooded grassland and deciduous bushland, ca. 1600 m. Voucher: Beentje HJ et al. NMK Exped. 1189 (EA).
- *Hyparrhenia cymbaria* (L.) Stapf Habit: Herb. Habitat: Open hillsides bordering upland evergreen forest, 1740–2000 m. Voucher: Beenje HJ et al. NMK Exped. 939 (EA).
- *Isachne mauritiana* Kunth Habit: Herb. Habitat: In forest shade, 1500–1800 m. Vouchers: Beentje HJ 2131, Beentje HJ et al. NMK Exped. 1105, Bytebier B 1220, Bally PRO 8704 (EA).
- *Megathyrsus infestus* (Andersson) B.K.Simon & S.W.L.Jacobs Habit: Herb. Habitat: Deciduous woodland, bushland, grassland, ca. 550–600 m. Voucher: Greenway PJ & Kanuri K 12726 (EA).
- *Megathyrsus maximus* (Jacq.) B.K.Simon & S.W.L.Jacobs Habit: Herb. Habitat: Deciduous bushland, riverbanks and damp sites, roadsides, cultivations, 518–1010 m. Vouchers: Mwachala G et al. EW51, 70, 342 & 950, Vesey-Fitzgerald LD 4963, Mrs. Robertson SA 2198, Greenway PJ & Kanuri K 12784 (EA).
- *Melinis minutiflora* **P.Beauv.** Habit: Herb. Habitat: Open hillsides, forest edges, 1425–1850 m. Vouchers: Beentje HJ et al. NMK Exped. 1179, Bally PRO 8581 (EA).

- *Melinis repens* (Willd.) Zizka Habit: Herb. Habitat: Weed of disturbed places and old farmlands. Voucher: Greenway PJ & Kanuri K 12972 (EA).
- *Microchloa kunthii* Desv. Habit: Herb. Habitat: Open places with bare and shallow soil in bushland or grassland, 1040–1100 m. Voucher: Mwachala G et al. EW238 (EA).
- *Oplismenus undulatifolius* (Ard.) P.Beauv. Habit: Herb. Habitat: In forest shade, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 231 (EA).
- Panicum calvum Stapf Habit: Herb. Habitat: Forest shade and margins, 1040–2170 m. Vouchers: Mwachala G et al. EW219, Faden RB et al. NMK Exped. 102 (EA).
- Panicum hirtum Lam. Habit: Herb. Habitat: Deciduous bushland, wooded grassland on poor sandy soils, 610–980 m. Vouchers: Mungai GM et al. EW2653, Napper DM 1965 (EA).
- Panicum hochstetteri Steud. Habit: Herb. Habitat: Forest shade, ca. 1400 m. Voucher: Wakanene KM & Mwangangi OM 659 (EA).
- Panicum trichocladum Hack. ex K.Schum. Habit: Herb. Habitat: Bush or forest edge on sandy soils, 1400–1850 m. Vouchers: Faden RB et al. NMK Exped. 17 & 441 (EA).
- Pseudechinolaena polystachya (Kunth) Stapf Habit: Herb. Habitat: Forest shade and disturbed sites, 1425–1875 m. Vouchers: Faden RB et al. NMK Exped. 351 & 442 (EA).
- *Pseudobromus africanus* (Hack.) Stapf Habit: Herb. Habitat: Forest floor grass near forest margin, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 234 & 558 (EA).
- \*Setaria sulcata Raddi Habit: Herb. Habitat: Forest and woodland shades, 1700–1875 m. Vouchers: Beentje HJ 2132, Faden RB et al. NMK Exped. 574, Bally PRO 13618 (EA).
- Sporobolus natalensis (Steud.) T.Durand & Schinz Habit: Herb. Habitat: Forest margins, roadsides, disturbed and grazed places, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 265 (EA).
- *Tetrapogon bidentatus* Pilg. Habit: Herb. Habitat: Deciduous bushland, grassland, 549–853 m. Vouchers: Bogdan A 3903, Greenway PJ Kanuri K 12638 (EA).
- **Tetrapogon roxburghiana** (Schult.) P.M.Peterson Habit: Herb. Habitat: Wooded grassland, bushland and disturbed habitats, on dry or stony sandy soils, 548–945 m. Vouchers: Trapnell CG 2226, Frowd BH F13, MacDonald J 850, Graham MD 5, Mrs. Robertson SA 2186 (EA).
- *Themeda triandra* Forssk. Habit: Herb. Habitat: Open deciduous bushland, 1040–1100 m. Voucher: Mwachala G et al. EW349 (EA).
- Urochloa brizantha (A.Rich.) R.D.Webster Habit: Herb. Habitat: Deciduous woodland, wooded grassland, upland grassland, ca. 1780 m. Voucher: Wakanene KM & Mwangangi OM 748 (EA).
- *Urochloa deflexa* (Schumach.) H.Scholz Habit: Herb. Habitat: Margins of riverine forest, deciduous bushland, weedy places, 600–823 m. Vouchers: Bally PRO 8646, Polhill RM & Kibuwa SP 963 (EA).
- *Urochloa dictyoneura* (Fig. & De Not.) Veldcamp Habit: Herb. Habitat: Wooded grassland, deciduous bushland, ca. 998 m. Voucher: Mwachala G et al. EW301 (EA).

- *Urochloa distachya* (L.) T.Q.Nguyen Habit: Herb. Habitat: Shrubland, grassland, weedy places. Voucher: Greiling 48 (EA).
- *Urochloa lachnantha* (Hochst.) A.M.Torres & C.M.Morton Habit: Herb. Habitat: Damp soils, ca. 487 m. Voucher: Greenway PJ & Kanuri K 12717 (EA).
- *Urochloa leersioides* (Hochst.) A.M.Torres & C.M.Morton Habit: Herb. Habitat: Path sides, weedy places, old farmland, 600–1300 m. Vouchers: Muasya AM & Archibald S 2072, Christiaensen AR 205, Bally PRO 8643, Ciba-Geigy 2, Mrs. Robertson SA 2192, Hitchcock AS 24681 (EA).
- *Urochloa nigropedata* (Munro ex Ficalho & Hiern) A.M.Torres & C.M.Morton Habit: Herb. Habitat: Dry rocky and sandy soils in deciduous bushland, wooded grassland. Voucher: Rauh W Ke957 (EA).
- *Urochloa xantholeuca* (Hack.) H.Scholz var. *leucacrantha* (K.Schum.) Sosef Habit: Herb. Habitat: Deciduous bushland, sandy soils in disturbed places, 550–700 m. Vouchers: Leuthold W 121, Vesey-FitzGerald LDEF 4966 (EA).

## F38. SMILACACEAE

1 Genus, 1 species

Smilax anceps Willd. – Habit: Liana. Habitat: Forest edges, clearings and secondary associations of bushland, 1700–1875 m. Voucher: Gardner HM 1207 (EA).

## F39. VELLOZIACEAE

1 Genus, 1 species

Xerophyta spekei Baker – Habit: Herb/Shrub/Tree. Habitat: Rocky slopes and outcrops, 600–1000 m. Vouchers: Faden RB & Faden AJ 74/449, Gardner HM 2924, Medley KE p.r. (EA).

#### F40. ZINGIBERACEAE

1 Genus, 1 species

Aframomum angustifolium (Sonn.) K.Schum – Habit: Herb. Habitat: Riverine forest, swampy places, 1260–1450 m. Vouchers: Kabuye CHS et al. NMK Exped. 801, Bally PRO 8799, Faden RB et al. 71/1001 (EA).

# Part 6. Magnoliopsida

## F41. ACANTHACEAE

20 Genera, 37 species

- Barleria acanthoides Vahl Habit: Herb. Habitat: Roadside vegetation in savanna with many tall *Euphorbia* trees, 1400–1800 m. Voucher: Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J 6677 (EA).
- Barleria eranthemoides R.Br. ex C.B.Clarke var. eranthemoides Habit: Subshrub. Habitat: Open dry bushland, grassland on rocky slopes, disturbed and grazed ar-

- eas, 800–1000 m. Vouchers: Watuma BM W0005 (EA, HIB), Kabuye CHS et al. NMK Exped. 746, Medley KE 507 (EA).
- Barleria eranthemoides R.Br. ex C.B.Clarke var. agnewii I.Darbysh. Habit: Subshrub. Habitat: Open and dense dry bushland, grassland, degraded areas, ca. 823 m. Voucher: Polhill RM & Kibuwa SP 961 (EA).
- Barleria prionitis L. Habit: Subshrub. Habitat: Open Euphorbia-Acacia-Commiphora forest, rocky outcrops, 650–1000 m. Voucher: Medley KE 868 (EA).
- Barleria submollis Lindau Habit: Subshrub. Habitat: Forest edges, bushland, roadside, 800–1350 m. Vouchers: Kabuye CHS et al. NMK Exped. 605, Mungai GM et al. EW3576 (EA).
- Barleria taitensis S.Moore Habit: Subshrub. Habitat: Terminalia-Combretum woodland, Acacia-Commiphora bushland, rocky hillsides and sandy soils, 640–1206 m. Vouchers: Watuma BM W0013 (EA, HIB), Wakanene KM & Mwangangi OM 512, Polhill RM & Paulo S 935, Hucks M 894, Hildebrandt JM 2457 (EA).
- Barleria volkensii Lindau Habit: Subshrub. Habitat: Acacia bushland, drier parts of montane forest, ca. 1220 m. Voucher: Napier ER 1080 (EA).
- Blepharis maderaspatensis (L.) B.Heyne ex Roth Habit: Herb. Habitat: Disturbed and secondary vegetation, woodland and forest habitats, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 652 (EA).
- *Brillantaisia cicatricosa* Lindau Habit: Subshrub. Habitat: Mist forest margins, ca. 1557 m. Voucher: Watuma BM W0214 (EA, HIB).
- *Crabbea velutina* **S.Moore** Habit: Herb. Habitat: Riverine vegetation, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 715 (EA).
- Crossandra friesiorum Mildbr. Habit: Herb. Habitat: Moist and dry evergreen mist forest, 820–1850 m. Vouchers: Beentje HJ et al. NMK Exped. 996, Faden RB, Evans A, Githui M 70/173 (EA). Vulnerable.
- Crossandra mucronata Lindau Habit: Subshrub. Habitat: Acacia-Commiphora woodland and bushland on sandy soils and rocky outcrops, 609–750 m. Vouchers: Polhill RM & Kibuwa SP 942, Napier ER 890, Gillett JB 17223, McDonald JM 878 (EA).
- Crossandra tridentata Lindau Habit: Subshrub. Habitat: Undergrowth in upland rainforest, 1400–2135 m. Vouchers: SAJIT–003293, Watuma BM W0022 & W0053 (EA, HIB), Wakanene KM & Mwangangi OM 262, 393 & 688, De Block P et al. 256, 257 & 259, Faden RB et al. NMK Exped. 191, Faden RB et al. 69/860, Bally PRO 8753 & 13519 (EA), Joanna B 9067 (EA).
- Malombe, Mwachala & Vollesen Habit: Subshrub. Habitat: *Combretum, Acacia & Terminalia* woodland, wooded grassland and bushland, old cultivation, 800–1370 m. Vouchers: Watuma BM W0156 (EA, HIB), Malombe I et al. EW4004, 4013, 4041, 4047 & 4065, Mwachala G et al. EW756 & 846, Luke WRQ et al. 5389, Verdcourt B & Polhill RM 2738, Drummond RB & Hemsley JH 4409, Napier ER 1089 (EA). Vulnerable.
- *Ecbolium subcordatum* C.B.Clarke var. *glabratum* Vollesen Habit: Herb. Habitat: *Acacia-Commiphora* bushland, riverbanks and riverbeds, 500–1000 m. Vouchers: SAJIT–005392 (EA, HIB), Napier ER 960 (EA).

- *Hypoestes aristata* (Vahl) Sol. ex Roem. & Schult. Habit: Herb. Habitat: Forest margins and clearings, 609–1850 m. Vouchers: Kabuye CHS et al. NMK Exped. 591, Beentje HJ et al. NMK Exped. 446, Hildebrandt JM 2563, Johnston HH s.n. (EA).
- NE Isoglossa candelabrum Lindau Habit: Shrub. Habitat: Moist lowland and midaltitude forest, 1220–1350 m. Vouchers: Luke WRQ & Luke PA 4137, Hemp A 5375, Archer PG 570 (EA). Endangered.
- Isoglossa gregorii (S.Moore) Lindau Habit: Herb. Habitat: Forest margins and clearings, ericaceous bushland, 1800–2170 m. Vouchers: Faden RB et al. NMK Exped. 112, Drummond RB & Hemsley JH 4311, Gillett JB, Burtt BL & Osborn RM 17098 (EA).
- *Isoglossa lactea* Lindau ex Engl. subsp. saccata I.Darbysh. Habit: Herb. Habitat: Undergrowth and margins of moist forest, 1200–1980 m. Vouchers: Luke WRQ et al 4129, Beentje HJ et al. NMK Exped. 871, Drummond RB & Hemsley JH 4373, Bally PRO 8771, Napier ER 1118 (EA).
- *Isoglossa laxa* Oliv. Habit: Subshrub. Habitat: Montane forest understorey, clearances and secondary growth, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 349 (EA).
- *Isoglossa punctata* (Vahl) Brummitt & J.R.I.Wood Habit: Herb. Habitat: Montane forest undergrowth, pathways and margins, ca. 1728 m. Voucher: SAJIT–006355 (EA, HIB).
- *Isoglossa substrobilina* C.B.Clarke Habit: Subshrub. Habitat: Montane forest undergrowth, glades, margins and disturbed places, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 298 (EA).
- *Justicia flava* (Forssk.) Vahl Habit: Shrub. Habitat: Forest margins and clearings, ca. 609 m. Voucher: Johnston HH s.n. (EA).
- *Justicia galeata* Hedrén Habit: Shrub. Habitat: Semi-deciduous lowland forest, *Acacia-Commiphora* bushland, 880–1200 m. Vouchers: Mwachala G et al EW984 & 1449, Luke WRQ 5515 & 6236 (EA). Vulnerable.
- *Justicia heterocarpa* T.Anderson Habit: Herb. Habitat: *Acacia-Commiphora* bushland, forest margins, roadsides, ca. 880 m. Vouchers: Mwachala G et al. EW959, Verdcourt B 5316 (EA).
- Justicia pseudorungia Lindau Habit: Shrub. Habitat: Montane evergreen forest, riverine forest, 1300–1875 m. Vouchers: Faden RB et al. NMK Exped. 530, Faden RB et al. 71/260 (EA).
- *Lepidagathis scariosa* Nees Habit: Subshrub. Habitat: Dry *Acacia-Commiphora-Grewia-Combretum-Euphorbia* bushland and woodland, 600–720 m. Vouchers: Medley KE 993, Mrs Robertson SA 6536 (EA).
- Monechma debile (Forssk.) Nees Habit: Herb. Habitat: Disturbed forest, Acacia-Commiphora bushland, roadsides, weed of cultivation, 609–1602 m. Vouchers: Watuma BM W0275 (EA, HIB), Kabuye CHS et al. NMK Exped. 625, Mwachala G et al. EW916, Hilderbrandt JM 2397, Johnston HH s.n. (EA).
- Neuracanthus tephrophyllus Bidgood & Brummitt subsp. tsavoensis Bidgood & Brummitt Habit: Subshrub. Habitat: Acacia and Acacia-Commiphora bushland, ca. 590 m. Voucher: Faden RB & Faden AJ 74/519 (EA). Endangered.

- Nicoteba betonica (L.) Lindau Habit: Herb. Habitat: Evergreen forest clearings, disturbed areas ca. 1584 m. Voucher: Watuma BM W0135 (EA, HIB).
- *Phaulopsis imbricata* (Forssk.) Sweet Habit: Herb. Habitat: Montane forest edges, secondary scrub, clearings and disturbed places, 1400–1850 m. Vouchers: Mungai GM et al. EW3197, Beentje HJ et al. NMK Exped. 999, Drummond RB & Hemsley JH 4381 (EA).
- *Pseuderanthemum hildebrandtii* (C.B.Clarke) Lindau Habit: Subshrub. Habitat: Riverine forest, thicket and bushland, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 733 (EA).
- *Rhinacanthus angulicaulis* I.Darbysh. Habit: Herb. Habitat: Dense or open *Acacia-Commiphora* bushland, dry semi-evergreen forest, 900–1250 m. Voucher: SA-JIT–005376 (EA, HIB).
- Ruellia prostrata Poir. Habit: Herb. Habitat: Woodland, bushland and grassland, ca. 800 m. Voucher: Mwachala G et al. EW3301 (EA).
- Ruttya fruticosa Lindau Habit: Shrub. Habitat: Disturbed bushland, woodland, 620–650 m. Vouchers: Medley KE 548, 551 & 711 (EA).
- *Thunbergia alata* Bojer ex Sims Habit: Climber. Habitat: Wet forest margins, *Acacia-Commiphora* bushland, disturbed places, 1100–1925 m. Vouchers: Wakanene KM & Mwangangi OM 724, Faden RB & Evans A 69/856, 857 & 887, Bally PRO 13506 & 14203, Faden RB et al. NMK Exped. 255, Kluguess LM 25 (EA).
- *Thunbergia guerkeana* Lindau Habit: Climber. Habitat: *Acacia-Commiphora* bushland, 450–550 m. Vouchers: Medley KEM 980 (EA), Verdcourt B 1112, Holm K & Holm L 10, Dale IR K2048, Gillett JB 17214, Scott Elliott GF 6166 (EA).
- **Thunbergia schimbensis S.Moore** Habit: Herb. Habitat: *Acacia-Commiphora*, *Combretum-Terminalia* woodland, bushland, ca. 890 m. Voucher: Faden RB, Faden AJ & Smeenk C 71/988 (EA).

#### F42. ACHARIACEAE

2 Genera, 2 species

- Dasylepis integra Warb. Habit: Tree. Habitat: Understorey in rainforest, 1400–1925 m. Vouchers: SAJIT–003291 & 006356 (EA, HIB), Mwachala G et al. EW1445, Faden RB & Evans A 69/879, Faden RB et al. 71/19, Faden RB et al. NMK Exped. 242 & 1050, Medley KE 1006a, Drummond RB & Hemsley JH 4341, Gardner HM 1212 & 2937, Gardiner N 2949, Joanna B 8918 & 8759, Raler I 0011 (EA).
- Rawsonia lucida Harv. & Sond. Habit: Tree. Habitat: Understorey and shrub layer in upland rainforest, 1000–1750 m. Vouchers: Luke WRQ & Luke PA 4100 & 5489, Faden RB, Evans A & Rathbun G 69/479, Medley KE 1015 (EA).

## F43. AIZOACEAE

2 Genera, 3 species

*Trianthema ceratosepalum* Volkens & Irmsch. – Habit: Subshrub. Habitat: *Acacia* bushland on alkaline soils, ca. 600 m. Voucher: Hucks M 440 (EA).

- *Trianthema portulacastrum* L. Habit: Herb. Habitat: Weed of cultivation, disturbed places, sandy soils, 600–900 m. Vouchers: Hucks M 729, Mrs Robertson SA 3612 & 3680 (EA).
- Zaleya pentandra (L.) C.Jeffrey Habit: Herb. Habitat: Open woodland and bushland, cultivation and roadside weed, 480–900 m. Vouchers: Napier ER 1000, Hildebrandt JM 2400, Mrs Robertson SA 3673, Leuthold W 109 (EA).

# F44. ALISMATACEAE

1 Genus, 1 species

*Alisma plantago-aquatica* L. – Habit: Herb. Habitat: Swampy places, water drainage, ca. 1200 m. Voucher: Lubai IK HB14 (EA).

## F45. AMARANTHACEAE

15 Genera, 25 species

- Achyranthes aspera L. var. aspera Habit: Herb. Habitat: Open areas in mist forest patches, along paths, weed of cultivation or disturbed ground, 600–1957 m. Vouchers: Watuma BM W0266 (EA, HIB), Hucks M 885 & 1050 (EA).
- Achyranthes aspera L. var. sicula L. Habit: Herb. Habitat: Montane forest edges, 1450–1780 m. Vouchers: Wakanene KM, Mwangangi OM & Dunn B 300, 387 & 744, Bally JB 13613 (EA).
- \*Alternanthera pungens Kunth Habit: Herb. Habitat: Weed in trodden places, along tracks and roadsides, 500–950 m. Vouchers: Mwachala G et al. in EW502, Mrs Robertson SA 3678, Bally PRO B13249a, Robel B 125, Geigy Ciba 10, Ivens GW 2611 (EA).
- \*Alternanthera sessilis (L.) R. Br. ex DC. Habit: Herb. Habitat: Along river, damp forests, ca. 1372 m. Voucher: Kabuye CHS 82/42 (EA).
- \*Amaranthus graecizans L. subsp. thellungianus (Nevski) Gusev Habit: Herb. Habitat: Weed in disturbed and grazed lands, 550–610 m. Voucher: Napier ER 911 (EA).
- \*Amaranthus hybridus L. subsp. hybridus Habit: Herb. Habitat: Cultivations and ruderal lands, roadsides and forest edges, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 620 (EA).
- *Celosia anthelminthica* Asch. Habit: Herb. Habitat: Bushes on forest edges, road-side, 800–1875 m. Vouchers: Watuma BM W0258 (EA, HIB), Kabuye CHS et al. NMK Exped. 604, Faden RB et al. NMK Exped. 534, Hucks M 738 (EA).
- Celosia hastata Lopr. Habit: Herb. Habitat: Forest edges, 900–1875 m. Vouchers: Kabuye CHS 82/69, Wakanene KM & Mwangangi OM 232, Faden RB et al. NMK Exped. 352, Beentje HJ et al. NMK Exped. 402, Faden RB, Evans A 71/119 (EA).
- Celosia schweinfurthiana Schinz Habit: Herb. Habitat: Forest clearings, rocky scrubland, wooded grassland, 1150–1250 m. Vouchers: Mungai G et al. EW1409, Luke WRQ et al 2 (EA).

- *Celosia trigyna* L. Habit: Herb. Habitat: Roadsides, short grassland, weed of cultivation, 610–1580 m. Vouchers: Kabuye CHS 82/111, Napier ER 995 (EA).
- *Centemopsis kirkii* (Hook.f.) Schinz Habit: Herb. Habitat: Deciduous woodland and bushland, waste ground, roadsides. Vouchers: Bally PRO 8657, Hittu 45 (EA).
- *Chenopodiastrum fasciculosum* Aellen Habit: Herb. Habitat: Weed of forest margins, roadside, waste places, ca. 1700 m. Voucher: Gillett JB, Burtt BL, Osborn RM 17073 (EA).
- Cyathula cylindrica Moq. Habit: Herb. Habitat: Mist forest, riverside, woodland, open bushland and rocky places, 998–2170 m. Vouchers: Mwachala G et al. EW48 (EA), Wakanene KM & Mwangangi OM 720, Faden RB et al. NMK Exped. 130 & 432, Klungness LM 60 (EA).
- Cyathula uncinulata (Schrad.) Schinz Habit: Herb. Habitat: Dense forest, open bush, short grassland, disturbed places, near water, 1200–1780 m. Vouchers: Wakanene KM & Mwangangi OM 751, Napier ER 1115, Gillett JB 23890 (EA).
- *Digera muricata* (L.) Mart. var. *macroptera* C.C.Towns. Habit: Herb. Habitat: *Acacia-Commiphora* bushland, 700–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 736, Faden RB & Faden AJ 74/265 (EA).
- *Digera muricata* (L.) Mart. subsp. *trinervis* C.C.Towns. Habit: Herb. Habitat: *Acacia-Commiphora* bushland, dry seasonal beds, ca. 900 m. Vouchers: Gardner H 2988, MacDonald J 869, Bally PRO 8803, ERV 906, Mrs Robertson SA 3674 (EA).
- \*Gomphrena celosioides Mart. Habit: Herb. Habitat: Trodden paths, roadsides, weed of cultivation, 520–1100 m. Vouchers: Mwachala G et al. EW912, Mungai GM et al. EW2837, Faden RB & Faden AJ 74/475, Greenway PJ & Kanuri K 12783, Hucks M 1023 (EA).
- \*Guilleminea densa (Willd. Ex Schult.) Moq. Habit: Herb. Habitat: Trodden and waste ground, roadside, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 682 (EA).
- Ouret lanata (L.) Kuntze Habit: Herb. Habitat: Weed in open habitats, 800–1450 m. Vouchers: Mwachala et al. EW943, Wakanene KM & Mwangangi OM 294, Msafiri F & Ojiambo L 326 (EA).
- **Psilotrichum cyathuloides Suess. & Launert** Habit: Herb. Habitat: Open grassy areas in forest, disturbed places. Voucher: Luke WRQ & Luke PA 4233 (EA).
- *Psilotrichum elliotii* Baker Habit: Herb. Habitat: Semi-evergreen bushland and thicket, 960–1873 m. Vouchers: SAJIT–004562 (EA, HIB), Kabuye CHS 82/152, Luke WRQ & Luke PA 5520, Gillett JB 19568 (EA).
- *Psilotrichum scleranthum* Thwaites Habit: Subshrub. Habitat: Riverine forest and scrub, secondary vegetation, roadsides, 650–1050 m. Vouchers: Kabuye CHS et al. NMK Exped. 632, Mwachala G et al. EW3296, Faden RB & Faden AJ 74/488, Medley KE 563, 690 & 756, Bally PRO 13587, Gilbert MG 6109 (EA).
- *Psilotrichum majus* Peter Habit: Subshrub. Habitat: Forest floor and margins, ca. 1746 m. Voucher: Watuma BM W0056 (EA, HIB).
- *Pupalia lappacea* (L.) Juss. var. *argyrophylla* C.C.Towns Habit: Herb. Habitat: Forest edges, clearings, bushland, abandoned cultivations, 600–1766 m. Vouchers:

- Watuma BM W0282 (EA, HIB), Mungai GM et al. EW2836, Napier ER 924, Hucks M 787 (EA).
- Sericocomopsis hildebrandtii Schinz Habit: Shrub. Habitat: Semi-desert scrub and deciduous bushland, 500–800 m. Vouchers: Hildebrandt JM 2584, Ossent JR 26 (EA).
- Sericocomopsis pallida (S.Moore) Schinz Habit: Shrub. Habitat: Semi-desert scrub and deciduous bushland, ca. 500–650 m. Vouchers: Napier ER 1006, Rauh W 30 (EA).
- Suaeda monoica Forssk. ex J.F.Gmel. Habit: Shrub. Habitat: Open bushland and scrub, ca. 600 m. Voucher: Hucks M 872 (EA).

# F46. ANACARDIACEAE

5 Genera, 11 species

- Lannea alata (Engl.) Engl. Habit: Tree. Habitat: Acacia-Commiphora bushland, rocky hill outcrops, 518–1700 m. Vouchers: Medley KE 509, Faden RB & Faden AJ 74/279, Friis I & Hansen OJ 2660, Dale IR 14565, Bally PRO 20505, Hucks M 455, Greenway PJ & Kanuri K 12687 (EA).
- Lannea rivae (Chiov.) Sacleux Habit: Tree. Habitat: Wooded grassland, deciduous bushland, rocky lava areas, 500–1000 m. Vouchers: Sacleux C 2353, Medley KE 973, Uhlig C 39 (EA).
- Lannea schweinfurthii (Engl.) Engl. Habit: Tree. Habitat: Deciduous woodland and bushland, river valleys, 950–1100 m. Vouchers: Watuma BM W0321 (EA, HIB), Mwachala G et al. EW187, Medley KE 426 & 851, Bally PRO 17117, Cheseny CMC 28/72, Greenway PJ & Kanuri K 8866, Gillett JB 19574 (EA).
- Ozoroa insignis Delile subsp. reticulata (Baker f.) J.B.Gillett Habit: Tree. Habitat: Wetter deciduous woodland and bushland, wooded grassland, 650–1200 m. Vouchers: Mwachala G et al. EW152, Mungai GM et al. EW1457, Medley KE 797 (EA).
- Searsia crenulata (A.Rich.) Moffett Habit: Tree. Habitat: Deciduous and evergreen woodland and bushland, 650–1200 m. Vouchers: Mungai GM et al. EW1293, Medley KE 447 & 574 (EA).
- Searsia longipes (Engl.) Moffett Habit: Tree. Habitat: Upland evergreen bushland, forest edges, 650–1836 m. Vouchers: Watuma BM W0115 (EA, HIB), Medley KE 646 & 790, Heller E s.n. (EA).
- Searsia pyroides (Burch.) Moffett var. pyroides Habit: Shrub. Habitat: Upland evergreen bushland, forest edges, 1700–2000 m. Vouchers: Faden RB et al. NMK Exped. 301, Beentje HJ et al. NMK Exped. 933 (EA).
- **Searsia quartiniana** (A.Rich.) A.J.Mill. Habit: Shrub. Habitat: Evergreen bushland, wooded grassland, riverine, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 601 (EA).
- Searsia tenuinervis (Engl.) Moffett Habit: Shrub. Habitat: Evergreen bushland, wooded grassland, riverine, 800–1800 m. Vouchers: Kabuye CHS et al. NMK

- Exped. 661, Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J 6680 (EA).
- Sclerocarya birrea (A.Rich.) Hochst. subsp. caffra (Sond.) Kokwaro Habit: Tree. Habitat: Bushland, 550–650 m. Vouchers: Medley KE 953, Mungai GM et al. EW s.n. (EA).
- Sorindeia madagascariensis DC. Habit: Tree. Habitat: Upland evergreen forest, 1425–1850 m. Vouchers: Wakanene KM & Mwangangi OM 381 & 653, Faden RB et al. NMK Exped. 381, Beentje HJ et al. NMK Exped. 880, Faden RB et al. 71/1012 (EA).

## F47. ANNONACEAE

5 Genera, 7 species

- \*Annona cherimola Mill. Habit: Shrub. Habitat: Cultivated, 700–900 m. Vouchers: Mungai GM et al. EW3281, Bally PRO 8598 (EA).
- Artabotrys monteiroae Oliv. Habit: Liana. Habitat: Forest edges in evergreen forest, 900–925 m. Vouchers: Mwachala G et al. EW902, Mungai GM et al. EW3540 (EA).
- *Monanthotaxis buchananii* (Engl.) Verdc. Habit: Shrub/Liana. Habitat: Riverine and hillside thicket, 1040–1100 m. Voucher: Mwachala G et al. EW201 (EA).
- Uvaria acuminata Oliv. Habit: Shrub/Liana. Habitat: Wet evergreen forest, scrubby forest, woodland, 600–1075 m. Vouchers: SAJIT–005397 (EA, HIB), Kabuye CHS et al. NMK Exped. 615, Mwachala G et al. EW194, 512 & 3324, Muasya J et al. 02/2006/06, Faden RB & Faden AJ 74/465, Medley KE 505 & 872, Faden RB et al. 70/956 & 957, Gillett JB 19566, Bally PRO 13589 (EA).
- *Uvaria lucida* Bojer ex Benth. Habit: Shrub. Habitat: Moist montane forest, rocky outcrops, 1450–1875 m. Vouchers: Faden RB et al. NMK Exped. 560, Faden RB, Faden AJ & Smeenk C 71/1008 (EA).
- *Uvaria scheffleri* Diels Habit: Shrub/Liana. Habitat: Forest, evergreen thicket and scrub, 650–1350 m. Vouchers: Watuma BM W0010 (EA, HIB), Kabuye CHS et al. NMK Exped. 622, Mwachala G et al. EW50, 112, 135, 280, 397 & 1297, Mungai GM et al. EW2824 (EA), Medley KE 742 (EA).
- *Xylopia aethiopica* (**Dunal**) **A.Rich.** Habit: Tree. Habitat: Evergreen and deciduous bushland, riverine associations, ca. 1078 m. Voucher: SAJIT–004635 (EA, HIB).

## F48. APHLOIACEAE

1 Genus, 1 species

Aphloia theiformis (Vahl) Benn. – Habit: Tree. Habitat: Montane evergreen forest, 1000–1950 m. Vouchers: SAJIT–006351 (EA, HIB), Faden RB et al. NMK Exped. 249 & 369, Drummond RB & Hemsley JH 4362, Raler I 0060, Faden RB & Faden AJ 71/1007, Gardner HM 2953, Joanna B 8939, Medley KEM s.n. (EA).

## F49. APIACEAE

8 Genera, 8 species

- Afroligusticum linderi (C.Norman) P.J.D.Winter Habit: Herb. Habitat: Forest remnants, margins and glades, 2000–2170 m. Voucher: Faden RB et al. NMK Exped.155 (EA).
- \*Cyclospermum leptophyllum (Pers.) Sprague ex Britton & P.Wilson Habit: Herb. Habitat: Weed of cultivated and waste ground, ca. 1316 m. Voucher: Kirika P et al. GBK 47990 (EA).
- Daucus incognitus (C.Norman) Spalik, Reduron & Banasiak Habit: Herb. Habitat: Montane forest margins and clearings, cultivated areas, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 477, Lubai lK HB19 (EA).
- Centella asiatica (L.) Urb. Habit: Herb. Habitat: Forest clearings, damp grasslands, ca. 1200 m. Voucher: Gillett JB & Burtt BL 17056 (EA).
- Heteromorpha arborescens (Spreng.) Cham. & Schltdl. Habit: Tree. Habitat: Montane forest margins, open woodland, rocky hill slopes, 650–1850 m. Vouchers: SAJIT–005336 (EA, HIB), Mwachala G et al. in EW3524, Luke WRQ & Luke PA 6434, Wakanene KM & Mwangangi OM 258, Beentje HJ et al. NMK Exped. 394, Raler I 0102, Medley KE 489, 644 & 821 (EA).
- *Lefebvrea longipedicellata* Engl. Habit: Herb. Habitat: Upland evergreen forest and margins, roadside, 810–1550 m. Vouchers: Kabuye CHS 82/90, Mwachala G et al. EW3561, Muasya J et al. GBK4799, Napier ER 1146 (EA).
- Sanicula elata Buch.-Ham. ex D.Don Habit: Herb. Habitat: Montane forest, secondary forest, 1400–2170 m. Vouchers: SAJIT–005322 (EA, HIB), Luke WRQ et al. 4193B, Christenhusz MJM et al. 6645, Faden RB et al. NMK Exped. 99 & 417, Faden RB et al. 71/246, Gillett JB, Burtt BL & Osborn RM 17083 (EA).
- Steganotaenia araliacea Hochst. Habit: Tree. Habitat: Dry woodland, deciduous bushland, rocky hillslopes, 720–1000 m. Vouchers: Mwachala G et al. EW566 & 967, Drummond RB & Hemsley JH 4413, Medley KE 750, Kluguess LM 46 (EA).

# F50. APOCYNACEAE

34 Genera, 64 species

- Acokanthera oppositifolia (Lam.) Codd Habit: Shrub. Habitat: Forest edges, dry forest, woodland, 1195–1875 m. Vouchers: SAJIT–004529 & 006398, Watuma BM W0274 (EA, HIB), Mwachala G et al. EW3057a, Medley KE 939, Taita Hills NMK Exped. 305, Joanna in CM 8902 (EA).
- *Adenium obesum* (Forssk.) Roem. & Schult. Habit: Shrub. Habitat: Dry woodland and bushland, 487–800 m. Vouchers: SAJIT–005404 (EA, HIB), Archer PG 622, Bally PRO 8675b, Alof E 318 (EA).
- *Ancylobothrys petersiana* (Klotzsch) Pierre Habit: Liana. Habitat: Woodland and bushland, 650–1000 m. Voucher: Medley KE 553 (EA).

- Baseonema gregorii Schltr. & Rendle Habit: Climber. Habitat: Dry bushland, evergreen forest on rocky outcrops, ca. 850 m. Voucher: Gilbert M & Gilbert C 6122 (EA).
- \*Calotropis gigantea (L.) W.T.Aiton Habit: Shrub. Habitat: Bare red soils near roads and villages, 600–700 m. Vouchers: SAJIT–005337 & 005388 (EA, HIB).
- *Calotropis procera* (Aiton) W.T.Aiton Habit: Shrub. Habitat: Evergreen bushland and scrub on red soils, roadside, ca. 622 m. Voucher: SAJIT–005360 (EA, HIB).
- Caralluma arachnoidea (P.R.O.Bally) M.G.Gilbert Habit: Climber. Habitat: Grass or succulent dominated communities, in the open or in between shrubs, 600–750 m. Vouchers: SAJIT–005411 (EA, HIB), Luke WRQ & Luke PA 4173, Newton LE 5589 (EA).
- Caralluma turneri E.A.Bruce subsp. tuneri Habit: Climber. Habitat: Sparse grassland, succulent bushland on sandy to loamy soil, ca. 1350 m. Voucher: Goyder DJ, Masinde PS, Ulrich M & Christopher WM 4033 (EA).
- Carissa bispinosa (L.) Desf. ex Merxm. Habit: Shrub. Habitat: Dry forest, 1000–1180 m. Vouchers: Mwachala G et al. in EW248, Mungai G et al. in EW1330 (EA).
- Carissa spinarum L. Habit: Shrub. Habitat: Roadside, bushland, forest edge, 650–1786 m. Vouchers: Watuma BM W0264 (EA, HIB), Omino EA 73 & 86, Medley KE 511, 767 & 850 (EA).
- Carissa tetramera (Sacleux) Stapf Habit: Shrub. Habitat: Montane woodland, thicket and bushland, 650–1000 m. Vouchers: Medley KE 483 & 850 (EA).
- Carvalhoa campanulata K.Schum. Habit: Shrub. Habitat: Moist and evergreen forest, riverine forest, 1000–1640 m. Voucher: Medley KE 437 (EA).
- \*Catharanthus roseus (L.) G.Don Habit: Tree. Habitat: Cultivated in villages, ca. 670 m. Voucher: Medley KE 424 (EA).
- *Ceropegia affinis* Vatke Habit: Climber. Habitat: *Acacia-Commiphora* woodland, ca. 500 m. Vouchers: Archer PG 110 & 397 (EA).
- Ceropegia affinis Vatke × Ceropegia racemosa N.E.Br. subsp. racemosa Habit: Climber. Habitat: Dry evergreen forest, bushland and thicket, rocky slopes, 800–1060 m. Vouchers: Masinde PS 844, Kabuye CHS et al. NMK Exped. 587, Gilbert M & Gilbert C 6120 (EA).
- Ceropegia albisepta Jum. & H.Perrier var. albisepta Habit: Climber. Habitat: Upland forest patches and riverine areas, 900–1300 m. Vouchers: Luke WRQ & Luke PA 5529, Archer PG 468 (EA).
- Ceropegia ampliata E.Mey. Habit: Climber. Habitat: Forest edges, bushland on rocky ground, ca. 914 m. Voucher: Archer PG 558 (EA).
- Ceropegia aristolochioides Decne. subsp. aristolochioides— Habit: Climber. Habitat: Semi-evergreen scrub, thickets and dry forests, 800–1000 m. Vouchers: Mwachala G et al. EW3345, Gillett JB 19563, Napier ER 940, Mrs Robertson SA 3588 (EA).
- Ceropegia ballyana Bullock Habit: Climber. Habitat: Forest patches, wooded bushland, riverine, 850–1250 m. Vouchers: SAJIT–006421 (EA, HIB), Kabuye

- CHS et al. NMK Exped. 681, Mungai GM et al. EW1296 & 1375, Faden RB, Evans A & Rathbun G 69/456, Napier ER 1145, Drummond RB & Hemsley JH 4419 (EA).
- Ceropegia bulbosa Roxb. Habit: Climber. Habitat: Forest clearings and glades, wooded grassland, ca. 1873 m. Voucher: SAJIT–003299 (EA, HIB).
- Ceropegia denticulata K.Schum. var. denticulata Habit: Climber. Habitat: Forest edges and bushland, 862–1100 m. Vouchers: SAJIT–004620, Watuma BM W0191 (EA, HIB), Masinde PS and Meve 820 & 870 (EA).
- NE Ceropegia distincta N.E.Br. var. rostrata Masinde Habit: Climber. Habitat: Forest edges and clearings, near streams and rivers, ca. 985 m. Voucher: Faden RB & Faden AJ 74/494 (EA).
- Ceropegia inornata P.R.O.Bally ex Masinde Habit: Climber. Habitat: Rocky deciduous bushland, 700–1050 m. Vouchers: Masinde PS, Goyder DJ, Meve U, Christopher MW 838, 839 & 853, Faden RB & Faden AJ 74/493, Archer PG 391 & 587, Gillett JB 19565 (EA).
- NE Ceropegia konasita Masinde Habit: Climber. Habitat: Bushland and thickets, sandy soil with high humus content, 985–1050 m. Vouchers: Masinde PS & Meve U 819 & 854, Faden RB & Faden AJ 74/492, Archer PG 428 (EA).
- Ceropegia meyeri-johannis Engl. Habit: Climber. Habitat: Forest edges and clearings, thickets on hills, 800–1000 m. Voucher: Masinde PS & Meve U 936, Kabuye CHS et al. NMK Exped. 748, Luke WRQ & Luke PA 4109 (EA).
- Ceropegia nilotica Kotschy Habit: Climber. Habitat: Acacia-Commiphora bushland, forest edges, 1000–1220 m. Vouchers: Masinde PS 836 & 840, Mwachala G et al. EW3267, Faden RB et al. 69/405, Napier ER 1137, Unknown collector KEN1002 (EA).
- Ceropegia speciosa H.Huber Habit: Climber. Habitat: Moist forest, 1795–1800 m. Voucher: Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J 6671 (EA).
- <sup>E</sup>Ceropegia verticillata Masinde Habit: Climber. Habitat: Dense and open evergreen forest, 1600–1800 m. Vouchers: Christenhusz MJM, Kamau P, Mbale M, Chase MW & Kyaa J 6671, Bytebier B 1160, Faden RB & Faden AJ 72/277, Joanna B 8790 & 8988 (EA).
- Cryptolepis nigrescens (Wennberg) L.Joubert & Bruyns Habit: Climber. Habitat: Gallery forests, thickets, 800–1200 m. Vouchers: SAJIT–005387 (EA, HIB), Mwachala G, Mungai GM & Lusweti A 261, Verdcourt B 3598A (EA).
- *Cynanchum gerrardi* (Harv.) Liede subsp. *gerrardi* Habit: Climber. Habitat: *Acacia* scrub, dry bushland, 850–930 m. Voucher: Goyder DJ & Masinde PS 3964 (EA).
- Cynanchum gerrardi (Harv.) Liede subsp. lenewtonii (Liede) Goyder Habit: Climber. Habitat: Acacia-Commiphora bushland, 610–1300 m. Voucher: Napier ER 1064 (EA).
- Cynanchum insipidum (E.Mey.) Liede & Khanum Habit: Climber. Habitat: Upland rainforest, Acacia-Commiphora bushland, open grassland, 750–1850 m.

- Vouchers: Gillett JB 17228, Christenhusz MJM et al. 6658, Beentje HJ et al. NMK Exped. 1048 (EA).
- Cynanchum stoloniferum (B.R.Adams & R.W.K.Holland) Goyder Habit: Climber. Habitat: Rocky ground, ca. 1400 m. Voucher: Gilbert MG 5824 (EA).
- Cynanchum viminale (L.) L. subsp. crassicaule Liede & Meve Habit: Herb/Climber. Habitat: Montane forest margins over rocks, ca. 1150 m. Vouchers: Goyder DJ, Masinde PS, Meve U & Whitehouse C 4029, Joanna B 9015 (EA).
- Cynanchum viminale (L.) L. subsp. odontolepis (Balf.f.) Goyder Habit: Herb/Climber. Habitat: Dry Acacia-Commiphora woodland. Voucher: Bally PRO 16663 (EA).
- Cynanchum viminale (L.) L. subsp. suberosum (Meve & Liede) Goyder Habit: Herb/Climber. Habitat: Acacia-Commiphora bushland, sandy soils, rocky ground, ca. 1050 m. Voucher: Godyer DJ, Masinde PS, Meve U & Whitehouse C 4031 (EA).
- Cynanchum viminale (L.) L. subsp. viminale Habit: Herb/Climber. Habitat: Commiphora bushland, 487–950 m. Vouchers: Watuma W0189 (EA, HIB), Mwachala G et al. EW769, Gillett JB 19585, Bally PRO 13566, Ossent JR 125, Greenway PJ & Kanuri K 12679 (EA).
- **Desmidorchis retrospiciens Ehrenb.** Habit: Shrub. Habitat. Semi-arid, open overgrazed lands, 600–800 m. Voucher: Hucks M 1045 (EA).
- **Desmidorchis speciosa** (N.E.Br.) Plowes Habit: Herb. Habitat: Dry bushland and wooded grassland, ca. 590 m. Voucher: Faden RB & Faden AJ 74/521 (EA).
- \*Gomphocarpus physocarpus E.Mey. Habit: Herb. Habitat: Seasonally wet pastures and disturbed lands, ca. 1400 m. Voucher: Mungai GM et al. EW1323 (EA).
- *Gymnema sylvestre* (Retz.) R.Br. ex Schult. Habit: Liana/Shrub. Habitat: Riverine forest margins, thicket and dry bushland, 900–1200 m. Voucher: SAJIT–005395 (EA, HIB).
- Holarrhena pubescens Wall. ex G.Don Habit: Shrub/Tree. Habitat: Riverine forest, woodland, evergreen bushland, 650–1400 m. Vouchers: Kabuye CHS et al. NMK Exped. 810 & 948, Mungai GM et al. EW2815, Medley KE 459, Bally PRO 13610 (EA).
- NE Huernia andreaeana (Rauh) L.C.Leach Habit: Herb. Habitat: Dry deciduous bushland on rocky ground, ca. 480 m. Voucher: Luke WRQ & Luke PA 5576 (EA).
- *Hunteria zeylanica* (Retz.) Gardner ex Thwaites Habit: Tree. Habitat: Riverine and evergreen forest, 1500–1875 m. Vouchers: Faden RB et al. NMK Exped. 217, Faden RB et al. 69/881 (EA).
- Landolphia buchananii (Hallier f.) Stapf Habit: Liana. Habitat: Upland rainforest margins, riverine forest, 1200–1875 m. Vouchers: SAJIT–004606 (EA, HIB), Beentje HJ 2192, Faden RB et al. NMK Exped. 509, Medley KE 687 (EA).
- *Marsdenia abyssinica* (Hochst.) Schltr. Habit: Liana. Habitat: Forest margins, montane woodland, 650–1000 m. Voucher: Medley KE 771 (EA).
- *Mondia whitei* (Hook.f.) Skeels Habit: Liana. Habitat: Moist habitats, riverine and disturbed forests, 1200–1300 m. Voucher: SAJIT–005352 (EA, HIB).

- *Orbea semota* (N.E.Br.) L.C.Leach Habit: Herb. Habitat: Grassland on steep slope, rocky places, ca. 1200 m. Voucher: Luke WRQ & Mrs. Robertson SA 5511 (EA).
- Orbea subterranea (E.A.Bruce & P.R.O.Bally) Bruyns Habit: Climber. Habitat: Bare ground, thin grassland, succulent communities, 600–680 m. Vouchers: Faden RB, Evans A & Rathbun G 69/480B, Joanna s.n. in Bally S20 (EA).
- NE Orbea taitica Bruyns Habit: Herb. Habitat: Rocky outcrops and inselbergs, ca. 1300 m. Voucher: Luke WRQ & Luke PA 5561 (EA).
- Pachycarpus lineolatus (Decne.) Bullock Habit: Herb. Habitat: Open deciduous woodland, seasonally waterlogged grasslands, ca. 1158 m. Voucher: Bally PRO 8577 (EA).
- *Pergularia daemia* (Forssk.) Chiov. subsp. *daemia* Habit: Climber. Habitat: Dry bushland, 450–1200 m. Vouchers: Watuma BM W0026 (EA, HIB), Goyder DJ & Masinde PS 3956 & 3957, Gillett JB 17210 & 17221 (EA).
- Pleiocarpa bicarpellata Stapf Habit: Shrub/Tree. Habitat: Moist evergreen forest, 1465–1616 m. Vouchers: SAJIT–006384 (EA, HIB), Omino EA 82 & 157, Luke WRQ & Luke PA 4202 (EA).
- *Rauvolfia caffra* Sond. Habit: Tree. Habitat: Moist forest, riverine forest, 650–1640 m. Voucher: Medley KEM s.r. (EA).
- Rauvolfia mannii Stapf Habit: Shrub/Tree. Habitat: Moist forest, 1000–1925 m. Vouchers: SAJIT–005347, Watuma BM W0049 (EA, HIB), Omino EA 52 & 81, Harvey YB, Mwachala G & Vollesen KB 32, Faden RB et al. NMK Exped. 172 & 354, Beentje HJ et al. NMK Exped. 851, Faden RB & Faden AJ 77/325, Drummond RB & Hemsley JH 4329, Faden RB & Evans A 69/876, Raler I 0042, Faden RB, Evans A, Msafiri F & Smeenk C 71/20, Lubai IK HB27, Medley KE 700 & 882 (EA).
- Saba comorensis (Bojer ex A.DC.) Pichon Habit: Liana. Habitat: Moist forest, forest edges, secondary forest, woodland, rocky places, 500–1350 m. Vouchers: Watuma BM W0153 (EA, HIB), Kabuye CHS 82/131, Mwachala G et al. EW583 & 910, Muasya J 2096, Omino EA 87, Kluguess LM 45, Bally PRO 1940, 1949, 8580, 13612, Greenwayi PJ 8771, Skinner FE & Mcgough JM s.n. (EA).
- Sacleuxia newii (Benth.) Bullock Habit: Shrub. Habitat: Acacia-Commiphora-Eu-phorbia deciduous bushland on rocky outcrops, 600–1000 m. Vouchers: Faden RB and Faden AJ 74/450, Luke WRQ & Luke PA 16117, Goyder et al. 4030, Medley KE 895, Gillett JB 16877 & 17237 (EA).
- Secamone alpini Schult. Habit: Liana. Habitat: Montane forest, 1400–1875 m. Vouchers: Wakanene KM & Mwangangi OM 665, Faden RB et al. NMK Exped. 552 (EA).
- Secamone punctulata Decne. Habit: Liana. Habitat: Forest, riverine and thickets, 800–1875 m. Vouchers: SAJIT–005357 (EA, HIB), Kabuye CHS et al. NMK Exped. 723B, Mwachala G et al. EW81, Mungai GM et al. EW1666, Beentje HJ et al. NMK Exped. 1012, Faden RB et al. NMK Exped. 563, Medley KE 753 (EA).
- Secamone schweinfurthii K.Schum Habit: Liana. Habitat: Acacia-Commiphora bushland and woodland, 650–1000 m. Vouchers: Kabuye CHS et al. NMK

- Exped. 611 & 723A, Mwachala G et al. EW948, Faden RB & Faden AJ 74/463, Medley KE 488, 500 & 864 (EA).
- Strophanthus mirabilis Gilg Habit: Shrub. Habitat: Acacia-Commiphora bushland, 550–650 m. Vouchers: Medley KE 653 & 785 (EA).
- Tabernaemontana stapfiana Britten Habit: Tree. Habitat: Montane forest, 1400–1875 m. Vouchers: SAJIT–004597, Watuma BM W0125 (EA, HIB), Beentje HJ et al. NMK Exped. 869, Faden RB et al. NMK Exped. 235 & 278, Drummond RB & Hemsley JH 4368, Gillett JB, Burtt BL & Osborn RM 17102, Faden RB, Faden AJ, Smeenk C 71/980, Raler I 0001 (EA).
- *Tabernaemontana ventricosa* Hochst. ex A.DC. Habit: Tree. Habitat: Forest margins, riverine and grassy areas. Voucher: Omino EA 85 (EA).
- *Tacazzea apiculata* Oliv. Habit: Liana. Habitat: Mist forest patches, stream sides, 1800–2000 m. Voucher: SAJIT–004583 (EA, HIB).
- *Tacazzea conferta* N.E.Br. Habit: Liana. Habitat: *Podocarpus* afromontane forest, moist bushland, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 339 (EA).
- *Telosma africana* (N.E.Br.) N.E.Br. Habit: Liana. Habitat: Margins of wet forest, 800–850 m. Voucher: Mwachala G et al. EW3338 (EA).
- Vincetoxicum fleckii (Schltr.) Meve & Liede Habit: Liana. Habit: Dry forest remnants, 800–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 594, Verdcourt B & Polhill RM 2737 (EA).
- EVincetoxicum sp. B of FTEA [Tylophora sp. B of FTEA] Habit: Climber. Habitat: Montane forest, ca. 1760 m. Voucher: Luke WRQ & Luke PA 5494 (EA).

# F51. AQUIFOLIACEAE

1 Genus, 1 species

*Ilex mitis* (L.) Radlk. – Habit: Tree. Habitat: Upland rainforest, dry evergreen forest, derived thicket, 1350–1850 m. Vouchers: Luke WRQ & Luke PA 4220, Wakanene KM & Mwangangi OM 620 & 624, Faden RB et al. NMK Exped. 377, Medley KE 923, Beentje HJ et al. NMK Exped. 1102, Raler I 0123 (EA).

# F52. ARALIACEAE

3 Genera, 5 species

- Astropanax myrianthus (Baker) Lowry, G.M.Plunkett & al. Habit: Liana/Tree: Habitat: Wet upland forest edges, 1400–2195 m. Vouchers: SAJIT–004578 (EA, HIB), Faden RB et al. NMK Exped. 140, Beentje HJ et al. NMK Exped. 884, Drummond RB & Hemsley JH 4323, Raler I 0052, Medley KE 926, Verdcourt B & Polhill RM 2720, Gillett JB, Burtt BL, Osborn RM 17090, Dale IR 11539, Gardner HM 2931, Faden RB et al. s.n. (EA) Near Threatened.
- Cussonia holstii Harms ex Engl. Habit: Tree. Habitat: Upland dry evergreen forest, evergreen montane woodland, 650–1000 m. Voucher: Medley KE 1009 (EA).

- Cussonia spicata Thunb. Habit: Tree. Habitat: Upland rainforest and dry evergreen forest, 1200–1640 m. Vouchers: Watuma BM W0127 (EA, HIB), Medley KE 1007, Verdcourt B & Polhill RM EAH11987, Raler I 0018 (EA).
- *Polyscias fulva* (Hiern) Harms Habit: Tree. Habit: Upland and lowland rainforest, 1400–1875 m. Vouchers: Faden RB et al. NMK Exped. 264, Drummond RB & Hemsley JH 4378, Raler I 0023, Medley KEM p.r. (EA).
- Polyscias stuhlmannii Harms Habit: Tree. Habitat: Rain- and mist-forest, 1425–1981 m. Vouchers: Watuma BM W0305 (EA, HIB), Wakanene KM & Mwangangi OM 630, Faden RB et al. NMK Exped. 288, 374 & 461, Raler I 0048, Faden RB & Githui M 70/745, Faden RB & Faden AJ 72/266 & 77/320, Faden RB, Faden AJ, Smeenk C 71/1004, Dale IR 1130, Gardner HM 2922 (EA). Endangered.

#### F53. ASTERACEAE

46 Genera, 77 species

- Acmella caulirhiza Delile Habit: Herb. Habitat: Forest margins, riverbanks, seasonally wet areas, cultivated areas, 1000–1560 m. Vouchers: Gillett JB & Burtt BL 17069, Sacleux C 1386 (EA).
- \*Acmella uliginosa (Sw.) Cass. Habit: Herb. Habitat: Damp moist forest zone, grassland near rivers ca. 1100–1200 m. Voucher: Mwachala G et al. EW570 (EA).
- Adenostemma mauritianum DC. Habit: Herb. Habitat: Margins of pathways through forest, forest edges, 1371–1875 m. Vouchers: SAJIT–006372 (EA, HIB), Faden RB et al. NMK Exped. 292 & 954, Drummond RB & Hemsley JH 4383, Dale IR 3808, Napier ER 1117 (EA).
- *Ambassa hochstetteri* (Sch.Bip. ex Walp.) Steetz Habit: Subshrub. Habitat: Forest and forest margins, 1500–2170 m. Vouchers: SAJIT–004106 (EA, HIB), Drummond RB & Hemsley JH 4297, Faden RB et al. NMK Exped. 144 (EA).
- Anisopappus chinensis Hook. & Arn. subsp. oliverianus (Wild) S.Ortíz, Paiva & Rodr.Oubiña Habit: Herb. Habitat: Forest margins and ruderal sites, 1100—2000 m. Vouchers: Luke WRQ & Luke PA 5357, Drummond RB & Hemsley JH 4347, Faden RB et al. NMK Exped. 439, Sacleux C 1397, Lewis WH 5933, Dale IR 3805 (EA).
- Aspilia mossambicensis (Oliv.) Wild Habit: Subshrub. Habitat: Forest margins, woodland, bushland and grassland, ruderal sites, 500–1359 m. Vouchers: Watuma BM W0250 (EA, HIB), Medley KE 900 (EA).
- *Baccharoides lasiopus* (O.Hoffm.) H.Rob. Habit: Shrub. Habitat: Forest clearings or margins, secondary bush derived from forest, ca. 700–1121 m. Vouchers: Medley KE 831, Hildebrandt JM 2551 (EA).
- *Bidens hildebrandtii* O.Hoffm. Habit. Subshrub. Habitat: Scrub on hillsides, rock crevices, 609–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 649, Hildebrandt JM 2432, Napier ER 1016, Verdcourt B 3890A (EA).

- Bidens holstii Sherff Habit: Subshrub. Habitat: Forest margins, disturbed forests, open bushland next to forest, 1000–2195 m. Vouchers: Luke WRQ & Luke PA 4168, Ojiambo 31, Beentje HJ 2136, Faden RB et al. NMK Exped. 14, Hildebrandt JM 2432a, Sacleux C 2503, Gillett JB 18769, Verdcourt B & Polhill RM 2718, Napier ER 1321, Faden RB et al. 71/130, Lewis WH 5934, Lynes H 282 (EA).
- Bidens kilimandscharica (O.Hoffm.) Sherff Habit: Herb. Habitat: Forest margins, wooded grassland, 750–1582 m. Vouchers: Watuma BM W0255 (EA, HIB), Mwachala G et al. EW3141, Kirika P et al. 1/2006/07, Muasya J & Medley KE 817, Sacleux C 2424 (EA).
- Blepharispermum zanguebaricum Oliv. & Hiern Habit: Shrub. Habitat: Dry forest, forest margins, woodland, bushland, 650–1000 m. Vouchers: Watuma BM W0027 (EA, HIB), Medley KE 543 & 570, Gillett JB 17225 (EA).
- Bothriocline argentea (O.Hoffm.) Wild & G.V.Pope Habit: Shrub. Habitat: Montane forest in rock crevices, 1700–2000 m. Vouchers: Faden RB et al. NMK Exped. 291, Bally PRO 13510, Drummond RB & Hemsley JH 4348 (EA).
- NE Bothriocline glomerata (O.Hoffm. & Muschl.) C.Jeffrey Habit: Shrub. Habitat: Evergreen forest, 1600–2000 m. Vouchers: Luke WRQ et al. 4209, Drummond RB & Hemsley JH 4361 (EA). Endangered.
- Bothriocline longipes (Oliv. & Hiern) N.E.Br. Habit: Subshrub. Habitat: Forest margins and clearings, disturbed places, 1650–1850 m. Vouchers: Wakanene K, Mwangangi & Dunn B 388, Drummond RB & Hemsley JH 4287, Kluguess LM 1 (EA).
- **Brachylaena huillensis O.Hoffm.** Habit: Shrub/Tree. Habitat: Dry evergreen and semi-deciduous forest, bushland on sandy soils, 650–1000 m. Vouchers: Faden RB & Faden AJ 74/467, Medley KE 921 (EA). Near Threatened.
- Conyza newii Oliv. & Hiern Habit: Subshrub. Habitat: Forest margins and grassy clearings, 1500–2057 m. Vouchers: Lewis WH 5935, Murray High School 25, Klungness LM 57 (EA).
- Crassocephalum crepidioides (Benth.) S.Moore Habit: Herb. Habitat: Moist forest margins, secondary vegetation, disturbed places, cultivation weed, 1000–2000 m. Vouchers: Sacleux C 894 & 2506 (EA).
- Crassocephalum montuosum (S.Moore) Milne-Redh. Habit: Herb. Habitat: Moist and evergreen forest in edges and clearings, 1350–1400 m. Voucher: Joanna B 8866 (EA).
- *Dichrocephala chrysanthemifolia* (Blume) DC. Habit: Herb. Habitat: Secondary vegetation, margins of cultivated lands, ca. 1800 m. Voucher: Drummond RB & Hemsley JH 4318 (EA).
- *Emilia discifolia* (Oliv.) C.Jeffrey Habit: Herb. Habitat: Grassland, disturbed areas, roadside, cultivated areas, 900–1300 m. Voucher: Sacleux C 2606 (EA).
- Emilia somalensis (S.Moore) C.Jeffrey Habit: Herb. Habitat: Short grassland on rocky slopes, mountain summits, 1330–1750 m. Vouchers: Mwachala G et al. EW3149, Wakanene KM & Mwangangi OM 561, Hilderbrandt JM 2557 (EA).

- \**Erigeron karvinskianus* **DC.** Habit: Herb. Habitat: Montane forest, roadside banks and clearings, 1150–2170 m. Vouchers: Faden RB et al. NMK Exped. 85, Friis I & Hansen OJ 2668, Bally PRO 13629, Kluguess LM 62 (EA).
- *Eriosema nutans* Schinz Habit: Herb. Habitat: Forest edges, grassland with *Acacia*, 1675–1725 m. Voucher: SAJIT–003298 (EA, HIB).
- Erythrocephalum marginatum (O.Hoffm.) S.Ortíz & A.P.Cout. Habit: Herb. Habitat: Subshrub. Dry forest, riverine forest margins, rocky slopes, deciduous woodland, 800–1700 m. Vouchers: Kabuye CHS et al. NMK Exped. 623, Mwachala G et al. EW521, Wakanene KM & Mwangangi OM 447, Gillett JB, Burtt B & Osborn RM 17162, Hildebrandt JM 2559 (EA).
- *Eschenbachia subscaposa* (O.Hoffm.) G.L.Nesom Habit: Herb. Habitat: Upland grassland, rocky areas, 1300–2170 m. Vouchers: Faden RB et al. NMK Exped. 152, Gilbert MG 7094 (EA).
- \*Flaveria trinervia (Spreng.) C.Mohr Habit: Herb. Habitat: Waste ground, weed of cultivation, 800–1500 m. Vouchers: SAJIT–004121 (EA, HIB), Wakanene KM & Mwangangi OM 710, Bally PRO 13905 (EA).
- \*Galinsoga parviflora Cav. Habit: Herb. Habitat: Forest margins, roadside, waste places, weed of cultivation. Voucher: Cheseny CMC 24/72 (EA).
- Gutenbergia cordifolia Benth. ex Oliv. Habit: Herb. Habitat: Forest margins and roadsides, grassland, rocky hillsides, cultivated lands, 950–1700 m. Vouchers: Mwachala G et al EW98, 331, 339, 804, 917 & 3121, Gillett JB, Burtt BL & Osborn RM 17074, Klungness LM 3 (EA).
- Gymnanthemum amygdalinum (Delile) Sch.Bip. Habit: Liana/Shrub/Tree. Habitat: Forest margins, woodland, secondary bushland, ca. 1400 m. Voucher: Wakanene KM & Mwangangi OM 657 (EA).
- *Gymnanthemum auriculiferum* (Hiern) Isawumi Habit: Shrub. Habitat: Forest clearings and margins, woodland, secondary bush, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 330 (EA).
- *Gymnanthemum myrianthum* (Hook.f.) H.Rob. Habit: Subshrub. Habitat: Evergreen forest clearings and margins, cultivated areas, 1676–1700 m. Vouchers: Drummond RB & Hemsley JH 4371, Klungness LM 54 (EA).
- Helichrysum forskahlii (J.F.Gmel.) Hilliard & B.L.Burtt Habit: Herb. Habitat: Upland grassland, forest margins and secondary vegetation, 610–2000 m. Vouchers: Kimeu JM et al. KEFRI 500, Beentje HJ et al. NMK Exped. 437b, Drummond RB & Hemsley JH 4308, Knox EB 2693 & 2712, Sacleux C 2428, Lisowski S 7301 (EA).
- Helichrysum glumaceum DC. Habit: Herb. Habitat: Grassland in dry bushland on hillsides, 450–950 m. Vouchers: Mwachala G et al. EW1275, Luke WRQ & Luke PA 16119, Kokwaro JO 2601, Napier ER 942, Bremer K 13, Gillett JB 21003B, Leuthold W 65 (EA).
- *Helichrysum luteoalbum* (L.) Rchb. Habit: Herb. Habitat: Montane grassland, streambanks, cultivation weed, 1150–1800 m. Vouchers: Joanna B & Opiko B 8994, Fleuret A 15 (EA).

- *Helichrysum kilimanjari* Oliv. Habit: Herb. Habitat: Montane grassland, shallow rocky soil on exposed hilltops, ca. 1676 m. Voucher: Joanna B 9004 (EA).
- Helichrysum nudifolium (L.) Less. var. oxyphyllum (DC.) Beentje Habit: Herb. Habitat: Grassland or scattered tree grassland, 1100–1500 m. Voucher: Sacleux C 2378 (EA).
- *Helichrysum odoratissimum* (L.) Sweet Habit: Herb. Habitat: Montane grassland or bushland, forest margins, 1100–1900 m. Vouchers: SAJIT–006403 (EA, HIB), Mwachala G et al. EW1188, Knox EB 2708 (EA).
- *Helichrysum panduratum* **O.Hoffm.** Habit: Herb. Habitat: Grassland or forest margins, secondary bush, 1400–1600 m. Voucher: Luke WRQ et al. 4212 (EA).
- *Helichrysum stenopterum* DC. Habit: Herb. Habitat: Forest margin, montane bushland in rocky sites, cultivations, 1100–2000 m. Vouchers: Beentje HJ et al. NMK Exped. 437a, Drummond RB & Hemsley JH 4307, Sacleux C 2501, Klungness LM 10, Joanna B s.n. (EA).
- Hoffmannanthus abbotianus (O.Hoffm.) H.Rob., S.C.Keeley & Skvarla Habit: Herb. Habitat: Dry forest margins, riverine forests, secondary bushland derived from forest, 610–1584 m. Vouchers: Watuma BM W0136 (EA, HIB), Medley KE 726 & 888, Hildebrandt JM 2466 & 2499 (EA).
- Jeffreycia usambarensis (O.Hoffm.) H.Rob., S.C.Keeley & Skvarla Habit: Shrub. Habitat: Secondary bushland, grassland, roadside, abandoned cultivations, 900–1875 m. Vouchers: Kabuye CHS 82/9, Mwachala G et al. EW798, 817 & 1249, Wakanene KM & Mwangangi OM 389 & 529, Faden RB et al. NMK Exped. 490A & 490B, Napier ER 1126, Freidberg A & Kaplan 91/45, Murray High School 30 (EA).
- Kleinia abyssinica (A.Rich.) A.Berger var. hildebrandtii (Vatke) C.Jeffrey Habit: Herb. Habitat: Bushland, dry grassland, woodland, open forest, 609–950 m. Vouchers: SAJIT–004618, Watuma BM W0184 (EA, HIB), Bally PRO 13953, Napier ER 898A (EA).
- *Kleinia grantii* Hook.f. Habit: Herb. Habitat: Open bushland on stony sites, scattered tree grassland, ca. 609 m. Voucher: Napier ER 899 (EA).
- *Kleinia implexa* (P.R.O.Bally) C.Jeffrey Habit: Herb. Habitat: *Acacia-Commiphora* bushland, sandy or rocky sites, ca. 775 m. Voucher: Faden RB & Faden AJ 77/314 (EA).
- *Kleinia odora* (Forssk.) DC. Habit: Herb. Habitat: *Acacia* bushland on rocky hill-sides, overgrazed sites, 560–700 m. Vouchers: Medley KE 761, Faden RB & Faden AJ 74/271 (EA).
- Kleinia squarrosa Cufod. Habit: Shrub. Habitat: Dry and moist bushland, 609–1750 m. Vouchers: Joanna B 8984, Archer PG 563, Gillett JB, Burtt BL, Osborn RM 17108 & 20730, Napier ER 1057, Bally J 13524 (EA).
- Lactuca glandulifera Hook.f. Habit: Herb. Habitat: Forest margins, derived bushland, roadsides, ca. 1591 m. Voucher: Watuma BM W0219 (EA, HIB).
- *Lactuca inermis* Forssk. Habit: Herb. Habitat: Open forest path sides, grassland, weed of cultivation, ca. 1814 m. Voucher: SAJIT–006400 (EA, HIB).

- Laggera brevipes Oliv. & Hiern Habit: Subshrub. Habitat: Forest edges, 1425–1850 m. Voucher: Faden RB et al. NMK Exped. 440 (EA).
- Lipotriche scandens (Schumach. & Thonn.) Orchard subsp. madagascariensis (Baker) D.J.N.Hind Habit: Herb. Habitat: Swamp and swamp margins, ca. 1200 m. Voucher: Lubai IK HB11 (EA).
- *Microglossa densiflora* Hook.f. Habit: Shrub. Habitat: Forest margins and clearings, 1773–2170 m. Vouchers: Watuma BM W0285 (EA, HIB), Drummond RB & Hemsley JH 4313, Faden RB et al. NMK Exped. 158 (EA).
- *Microglossa pyrifolia* (Lam.) Kuntze Habit: Shrub. Habitat: Drier forest margins, secondary bushland, abandoned cultivations, ca. 1818 m. Voucher: SAJIT–004541 (EA, HIB).
- *Microglossa pyrrhopappa* (Sch.Bip. ex A.Rich.) Agnew Habit: Herb. Habitat: Forest margins, secondary bushland, grassland, 750–2024 m. Vouchers: SA-JIT–006359 (EA, HIB), Hildebrandt JM 2508, Bally PRO 8714, Sacleux C 134 (EA).
- *Mikania chenopodiifolia* Willd. Habit: Herb. Habitat: Forest, stream banks, ca. 1632 m. Voucher: SAJIT–004590 (EA, HIB).
- *Orbivestus cinerascens* (Sch.Bip.) H.Rob. Habit: Subshrub. Habitat: *Acacia-Commiphora* bushland, 550–650 m. Vouchers: Medley KE 834 (EA).
- *Osteospermum vaillantii* (Decne.) Norl. Habit: Herb. Habitat: Montane heath and scrub, *Acacia-Commiphora* bushland, ruderal sites, 1000–1500 m. Vouchers: Mwachala G et al. EW1187, Sacleux C 2368 (EA).
- *Piloselloides hirsuta* (Forssk.) C.Jeffrey ex Cufod. Habit: Herb. Habitat: Deciduous forest, open deciduous woodland, grassland, ca. 1400–1800 m. Vouchers: Kirika P et al. 01/2006/33, Gillett JB 17256 (EA).
- *Pseudoconyza viscosa* (Mill.) D'Arcy Habit: Herb. Habitat: Moist sites along river, weed of cultivation, ca. 610 m. Voucher: Napier ER 981 (EA).
- *Psiadia punctulata* (DC.) Vatke Habit: Shrub. Habitat: Evergreen bushland, dry forest margins, secondary bushland, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 539, Gardner HM 3005 (EA).
- Senecio deltoideus Less. Habit: Liana. Habitat: Moist forest margins, secondary bushland in forest margin, 1500–1900 m. Vouchers: SAJIT–004115 (EA, HIB), Knox EB 2713, Sacleux C 2430 (EA).
- Senecio hadiensis Forssk. Habit: Liana. Habitat: Dry forest or forest margins, evergreen or semi-deciduous bushland, 800–1200 m. Vouchers: Mwachala G et al. EW197, Luke WRQ & Luke PA 6426, Drummond RB & Hemsley JH 4418, Sacleux C 2417, Medley KE 808 (EA).
- Senecio syringifolius O.Hoffm. Habit: Liana. Habitat: Evergreen forest, forest margins, 1500–2170 m. Vouchers: Watuma BM W0140 (EA, HIB), Wakanene KM & Mwangangi OM 645 & 723, Faden RB et al. NMK Exped. 134, Beentje HJ et al. NMK Exped. 1110 (EA).
- \*Senecio vulgaris L. Habit: Herb. Habitat: N/A. Voucher: Verdcourt B & Polhill RM 1418 (EA).

- *Sigesbeckia orientalis* L. Habit: Herb. Habitat: Ruderal sites, weed of cultivation, 1200–1400 m. Voucher: Bally PRO 8788 (EA).
- Solanecio angulatus (Vahl) C.Jeffrey Habit: Climber. Habitat: Riverine forest, bushland and thicket, 800–1583 m. Vouchers: Watuma BM W0194 & W0254 (EA, HIB), Kabuye CHS et al. NMK Exped. 726 (EA).
- NE Solanecio buchwaldii (O.Hoffm.) C.Jeffrey Habit: Shrub. Habitat: Moist forest, rock outcrops and crevices, 700–1875 m. Vouchers: Luke WRQ & Luke PA 4222, Gillett JB, Burtt BL & Osborn RM 17108, Faden RB et al. NMK Exped. 331, Newton LE 3247, Archer PG 563 & 14092, Bally PRO 13524 (EA).
- Solanecio mannii (Hook.f.) C.Jeffrey Habit: Shrub. Habitat: Forest glades and margins, near cultivated areas, 1400–1937 m. Vouchers: Watuma BM W0092 (EA, HIB), Beentje HJ 2140, Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J 6630, Faden RB et al. NMK Exped. 22 (EA).
- Solanecio mirabilis (Muschl.) C.Jeffrey Habit: Herb. Habitat: Moist upland forest, 1525–1850 m. Vouchers: Bytebier B 1279, Faden RB & Githui M 70/712 (EA). Endangered.
- Sonchus oleraceus L. Habit: Herb. Habitat: Ruderal sites, roadsides, weed of cultivation, ca. 1295 m. Voucher: Murray High School 101 (EA).
- Sphaeranthus kirkii Oliv. & Hiern Habit: Herb. Habitat: Seasonally wet sites, ditches in bushland, 500–600 m. Vouchers: Faden RB, Faden AJ & Holland P 72/143, Rauh W Ke68 (EA).
- \*Tagetes minuta L. Habit: Herb. Habitat: Weed of cultivated lands, ruderal sites, 600–1200 m. Vouchers: Cheseny CMC 104, Rauh W KE69a (EA).
- \**Tithonia diversifolia* (Hemsl.) A.Gray Habit: Subshrub. Habitat: Roadside, waste ground, hedge plant, 1524–1950 m. Vouchers: Watuma BM W0216 (EA, HIB), Kluguess LM 39 (EA).
- \*Tridax procumbens L. Habit: Herb. Habitat: Weed of cultivation and waste ground, 503–800 m. Vouchers: Wakanene KM & Mwangangi OM 704, Bremer K 14, Gardner HM 3003, Ciba-Geigy 8, Napier ER 934, Hucks M et al. 90, Greenway PJ & Kanuri K 13023 (EA).
- *Vernonia galamensis* (Cass.) Less. subsp. *galamensis* Habit: Herb. Habitat: Forest clearings, secondary bushland, 1624–1875 m. Vouchers: SAJIT–004126 (EA, HIB), Faden RB et al. NMK Exped. 570 (EA).
- Vernonia galamensis (Cass.) Less. subsp. mutomoensis M.G.Gilbert Habit: Herb. Habitat: Acacia-Commiphora bushland and woodland, rocky outcrops, 609–1150 m. Vouchers: Watuma BM W0007 (EA, HIB), Gilbert MG & Gilbert CI 6107, Polhill RM & Kibuwa SP 955, Hildebrandt JM 2455 & 2847 (EA).
- Vernonia holstii O.Hoffm. Habit: Subshrub. Habitat: Margins and clearings of dry evergreen forest, secondary bushland, 650–1440 m. Vouchers: SAJIT–005344 (EA, HIB), Beentje HJ et al. NMK Exped. 1101, Medley KE 596, Gillett JB 18757 (EA).
- Vernonia wakefieldii Oliv. Habit: Shrub. Habitat: Evergreen forest, deciduous bushland and thicket on rocky slopes, 600–1450 m. Vouchers: Kabuye CHS et

- al. NMK Exped. 745, Mwachala G et al. EW3117A & 3310, Kokwaro JO 2602, Faden RB & Faden AJ 74/479, Medley KE 701, Gardner HM 3007, Gillett JB 16873 & 19576, Gilbert MG 6111, Parker I 552H (EA).
- *Vernoniastrum aemulans* (Vatke) H.Rob. Habit: Herb. Habitat: Disturbed sites, roadsides, old cultivations, 500–1524 m. Vouchers: Kluguess LM 3A, Hucks M 680 & 762, Bremer K 7 (EA).

## F54. BALSAMINACEAE

1 Genus, 8 species

- EImpatiens engleri Gilg subsp. pubescens Grey-Wilson Habit: Herb. Habitat: Densely shaded forests, 1425–2134 m. Vouchers: SAJIT–05335 (EA, HIB), Wakanene KM & Mwangangi OM 687, Faden RB et al. NMK Exped. 279, 481, 767 & 946, Faden RB et al. 70/709 & 71/973, Bally PRO 8769, Drummond RB & Hemsley JH 4356, Knox EB 2689 (EA).
- *Impatiens nana* Engl. & Warb. Habit: Herb. Habitat: Moist and shaded places in upland rainforest, ca. 1750 m. Vouchers: Wakanene KM & Mwangangi OM 370, Stella W 173 (EA).
- Impatiens pseudoviola Gilg Habit: Herb. Habitat: Damp shaded upland rainforest, on mossy river banks, 1000–2170 m. Vouchers: SAJIT–004534 & 004542, Watuma BM W0021 & W0116 (EA, HIB), Mwachala G et al. 1051 & EW1340, Luke WRQ & Luke PA 4156, De Block P et al. 497, Faden RB et al. NMK Exped. 1, 97 & 395, Beentje HJ 2138, Beentje HJ et al. NMK Exped. 850, Bally PRO 8699, Faden RB & Githui M 70/734, Knox EB 2638, Gillett JB, Burtt BL & Osborn RM 17082 & 18760 (EA).
- *Impatiens sodenii* Engl. & Warb. Habit: Herb. Habitat: Upland rainforest in damp shaded or open areas, 1400–2200 m. Vouchers: Mwachala G, Nyaboke & Saidi S 1052 (EA), Luke WRQ & Luke PA 4192, Bytebier B 1676, De Block P et al. 307, Faden RB et al. NMK Exped. 36 & 289, Drummond RB & Hemsley JH 4294, Knox EB 2699, Gardner HM 2908 (EA).
- *Impatiens stuhlmannii* Warb. Habit: Herb. Habitat: Damp areas in upland rainforest, 1650–1900 m. Voucher: Knox EB 2697 (EA).
- Elmpatiens teitensis Grey-Wilson Habit: Herb. Habitat: Upland rainforest, 1425–2170 m. Vouchers: SAJIT–005316 (EA, HIB), Luke WRQ & Luke PA 5492, Wakanene KM & Mwangangi OM 215 & 373, Beentje HJ 2137, Faden RB et al. NMK Exped. 60 & 361, De Block P et al. 300, 313 & 496, Drummond RB & Hemsley JH 4339, Gillett JB, Burtt BL & Osborn RM 17097, Knox EB 2697, Faden RB et al. 71/972, Bally PRO 8584, 12714 & 18714, Gardner HM 2941, Joanna B & Opiko 8775 (EA).
- Impatiens tinctoria A.Rich. subsp. elegantissima (Gilg) Grey-Wilson Habit: Herb. Habitat: Upland rainforest in moist shaded places, ca. 1500 m. Voucher: Bally PRO 13606 (EA).
- *Impatiens walleriana* Hook.f. Habit: Herb. Habitat: Damp shaded places in upland rainforest, 1000–1450 m. Vouchers: Mwachala G et al. EW1341, Luke

WRQ & Bytebier B 5328, Beentje HJ et al. NMK Exped. 1065, Knox EB 2715, Faden RB, Faden AJ, Smeenk C, Smeenk N & Kichoi D 71/963, Bally PRO 8700, Archer PG 661 (EA).

# F55. BASELLACEAE

1 Genus, 2 species

Basella alba L. – Habit: Climber. Habitat: Forest and cultivation margins, forest-grassland transitions, 1500–1875 m. Vouchers: Watuma BM W0071 (EA, HIB), Wakanene KM & Mwangangi OM 721, Faden RB et al. NMK Exped. 562 & 847 (EA).

Basella paniculata Volkens – Habit: Climber. Habitat: Margins of dry evergreen forest and bushland, ca. 1371 m. Voucher: Joanna B 8878 (EA).

## F56. BEGONIACEAE

1 Genus, 1 species

Begonia johnstonii Oliv. ex Hook.f. – Habit: Herb. Habitat: Moist sites in rock crevices, 800–1515 m. Vouchers: Kabuye CHS et al. NMK Exped. 588, Mbale M et al. NMK 967, Luke WRQ et al. 4181, Faden RB, Evans A & Smeenk C 71/32, Faden RB, Evans A & Msafiri F 70/989, Faden RB et al. 71/215 (EA).

## F57. BIGNONIACEAE

1 Genus, 1 species

*Kigelia africana* (Lam.) Benth. subsp. *africana* — Habit: Tree. Habitat: Grassland with scattered trees, woodland, remnants in farmed lands, 800–950 m. Vouchers: Watuma BM W0202 (EA, HIB), Kabuye CHS et al. NMK Exped. 671 (EA).

## F58. BORAGINACEAE

6 Genera, 10 species

- Bourreria teitensis (Gürke) Thulin Habit: Shrub. Habitat: Dry evergreen forest, Acacia-Commiphora bushland, 500–1367 m. Vouchers: Watuma BM W0232 (EA, HIB), Faden RB et al. 69/423, Medley KE 429 & 492, Hildebrandt JM 2359 (EA).
- *Ehretia bakeri* Britten Habit: Shrub/Tree. Habitat: Mist forest on rocky slopes, deciduous woodland and bushland, 550–1450 m. Vouchers: Mwachala G et al. EW1410, Gardner HM 2986, Medley KE 520 & 728, Faden RB et al. s.n. (EA).
- *Ehretia cymosa* Thonn. var. *silvatica* (Gürke) Brenan Habit: Tree. Habitat: Rainforest, riverine forest, derived grassland and bushland, 1425–1875 m. Vouchers: Faden RB et al. NMK Exped. 491 & 564, Beentje HJ et al. NMK Exped. 855 & 957 (EA).

- Cordia monoica Roxb. Habit: Tree. Habitat: Acacia woodland, Acacia-Commiphora bushland, 550–650 m. Vouchers: Medley KE 524 & 533, Verdcourt B 3895B (EA).
- *Cordia sinensis* Lam. Habit: Tree. Habitat: *Acacia-Commiphora* open bushland, riverine, 550–650 m. Voucher: Medley KE 497 (EA).
- Cynoglossum coeruleum Hochst. ex A.DC. var. mannii (Baker & C.H.Wright) Verdc. Habit: Herb. Habitat: Submontane forest edges, 1700–2170 m. Vouchers: Faden RB et al. NMK Exped. 118 & 322, Drummond RB & Hemsley JH 4315 (EA).
- Cynoglossum lanceolatum Forssk. Habit: Herb. Habitat: Forest edge, grassland, bushland, ca. 1581 m. Vouchers: Watuma BM W0218 (EA, HIB), Gillett JB & Burtt BL 17053 (EA).
- Heliotropium steudneri Vatke subsp. steudneri Habit: Herb. Habitat: Combretum, Acacia and Commiphora bushland, grassland, 500–750 m. Vouchers: Gillett JB, Burtt BL & Dunn B 17172 & 17190, Bally PRO 8649, Thulin M 295 (EA).
- *Heliotropium steudneri* Vatke subsp. *bullatum* Verdc. Habit: Herb. Habitat: *Acacia-Commiphora* bushland and woodland, roadside, 970–1180 m. Voucher: Mwachala G et al. EW380 (EA).
- *Heliotropium zeylanicum* (Burm.f.) Lam. Habit: Herb. Habitat: *Acacia-Commi-phora* bushland, roadsides and cultivation, 950–1050 m. Voucher: Mwachala G et al. EW1446 (EA).
- *Trichodesma zeylanicum* (Burm.f.) R.Br. var. *zeylanicum* Habit: Herb. Habitat: *Commiphora-Grewia* bushland, disturbed ground and cultivations, 1750–1800 m. Voucher: Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J 6678 (EA).

## F59. BRASSICACEAE

- 5 Genera, 6 species
- \*Brassica rapa L. Habit: Herb. Habitat: Cultivated land, abandoned fields, ca. 1524 m. Voucher: Klungness LM 9 (EA).
- Cardamine africana L. Habit: Herb. Habitat: Montane forest, clearings, along road and paths, 1700–2170 m. Vouchers: Faden RB et al. NMK Exped. 151 & 332 (EA).
- *Erucastrum arabicum* Fisch. & C.A.Mey. Habit: Herb. Habitat: Disturbed places in upland forest, ca. 1295 m. Voucher: Murray High School 103 (EA).
- *Farsetia stenoptera* Hochst. Habit: Herb. Habitat: Open bushland, overgrazed and cultivated lands. Voucher: Cheseny CMS 33/73 (EA).
- Farsetia stenoptera Hochst. subsp. boivinii (E.Fourn.) Jonsell Habit: Subshrub. Habitat: Open grassland on sandy soils, ca. 487 m. Voucher: Greenway PJ & Kanuri K 12722 (EA).
- Farsetia undulicarpa Jonsell Habit: Shrub. Habitat: Bushland and wooded grasslands on volcanic soils, ca. 925 m. Voucher: Kuchar P 11069 (EA).

\*Lepidium bonariense L. – Habit: Herb. Habitat: Open grassland, roadside, waste places, settlements, 1585–1814 m. Vouchers: SAJIT–004655, Watuma BM W0252 (EA, HIB).

## F60. BURSERACEAE

2 Genera, 12 species

- **Boswellia neglecta S.Moore** Habit: Tree. Habitat: *Acacia-Commiphora* bushland, 400–850 m. Vouchers: SAJIT–005400 (EA, HIB), Medley KE 966, Faden RB & Faden AJ 74/250, Engler A 1973, Davey PRA 36 Dale IR 3897 (EA).
- Commiphora africana (A.Rich.) Engl. Habit: Tree. Habitat: Acacia-Commiphora bushland, bushed grassland, 660–950 m. Vouchers: SAJIT–005384, Watuma BM W0176 (EA, HIB), Mwachala G et al. EW151, 338, 526 & 1177, Cheseny CMC 49/75, Faden RB & Faden AJ 74/282, Medley KE 526, Gillett JB 19584, Bally PRO 16895, Dale IR 2000 (EA).
- Commiphora africana (A.Rich.) Engl. var. glaucidula (Engl.) J.B.Gillett Habit: Tree. Habitat: Bushed grassland, Acacia-Commiphora open bushland, 540–990 m. Vouchers: Gillett JB & Glover PE 16857, 19577, 19592, 19624 & 19632, Dale IR 2002, Leippert H 5645, Ivens GW 410 (EA).
- Commiphora africana (A.Rich.) Engl. var. venosa (Mattick) Govaerts Habit: Tree. Habitat: Bushed grassland, ca. 600 m. Vouchers: Cheseny CMC 44/74, Mrs. Robertson SA 6552 & 6556 (EA).
- Commiphora baluensis Engl. Habit: Tree. Habitat: Deciduous woodland and dry forest, often on rocky ground, 650–990 m. Vouchers: Medley KE 970, Gillett JB & Glover PE 19643, Verdcourt B & Polhill RM 2743 (EA).
- Commiphora campestris Engl. subsp. campestris Habit: Tree. Habitat: Acacia-Commiphora bushland, 550–650 m. Vouchers: Medlely KEM 775 (EA), Gillett JB & Glover PE 19623 (EA), Dale IR 3881 & 3894 (EA), Hildebrandt JM 2516 (EA), Bally PRO 8551 (EA). Near Threatened.
- Commiphora campestris Engl. var. heterophylla (Engl.) J.B.Gillett Habit: Tree: Habitat: Acacia-Commiphora bushland. Voucher: Gilbert MG & Gilbert CI 6096 (EA).
- Commiphora edulis (Klotzsch) Engl. subsp. boiviniana (Engl.) J.B.Gillett Habit: Shrub. Habitat: Acacia-Commiphora and semi-evergreen bushland, 600–770 m. Vouchers: SAJIT–005399 (EA, HIB), Mwachala G et al. EW1513, Medley KE 84, Faden RB & Faden AJ 74/278, Verdcourt B 3895, Leakey PH s.n. (EA).
- Commiphora edulis (Klotzsch) Engl. subsp. holosericea (Engl.) J.B.Gillett Habit: Shrub. Habitat: Acacia-Commiphora bushland, ca. 762 m. Vouchers: Dale IR 3880, Verdcourt B 1113 (EA).
- Commiphora eminii Engl. subsp. trifoliolata (Engl.) J.B.Gillett Habit: Tree. Habitat: Dry evergreen forest and forest margins, 650–1250 m. Vouchers: SA-JIT–005372, Watuma BM W0243 (EA, HIB), Luke WRQ & Luke PA 4099, Medley KE 446 & 600, Faden RB, Evans A, Smeenk C & Kariuki B 131 (EA).

- Commiphora kataf (Forssk.) Engl. Habit: Tree. Habitat: Montane woodland, Acacia-Commiphora bushland, 550–1024 m. Vouchers: Watuma BM W0317 (EA, HIB), Faden RB & Faden AJ 74/276, Medley KE 525, 721 & 774, Dale IR 3892, Engler A 1945 (EA).
- Commiphora kua (R.Br. ex Royle) Vollesen Habit: Shrub/Tree. Habitat: Acacia-Commiphora bushland, rocky places, bushed grassland, 550–940 m. Vouchers: SAJIT–005398, Watuma BM W0185 (EA, HIB), Medley KE 523, 550 & 723, Greenway PJ & Kanuri K 12658, 12893 & 12894, Hucks M 892 (EA).
- Commiphora oblongifolia J.B.Gillett Habit: Shrub/Tree. Habitat: Acacia-Commiphora bushland in rocky places, 600–840 m. Vouchers: Luke WRQ & Luke PA 16116, Cheseny CMC 11/72, Greenway PJ & Kanuri K 12661, Gillett JB & Glover PE 17233 & 19644, Verdcourt B 3889, Napier ER 1015 (EA). Near Threatened.
- Commiphora paolii Chiov. Habit: Shrub/Tree. Habitat: Acacia-Commiphora bushland, ca. 600 m. Voucher: Verdcourt B & Polhill R 2709 (EA).
- Commiphora samharensis Schweinf. Habit: Tree. Habitat: Acacia-Commiphora bushland and woodland, 750–870 m. Voucher: Medley KE 815 (EA).
- Commiphora schimperi (O.Berg) Engl. Habit: Shrub/Tree. Habitat: Acacia-Commiphora open deciduous woodland and bushland, 600–1000 m. Vouchers: Medley KE 684, Gillett JB & Glover PE 19582, 19588 & 19639 (EA).

## F61. CACTACEAE

2 Genera, 2 species

- \*Opuntia humifusa (Raf.) Raf. Habit: Shrub. Habitat: Dry deciduous bushland and thicket, 1019–1600 m. Vouchers: Watuma BM W0316 (EA, HIB), Beentje HJ et al. NMK Exped. 1144 (EA).
- Rhipsalis baccifera (J.S.Muell.) Stearn Habit: Shrub. Habitat: Upland rainforest, evergreen bushland, rocky cliffs, 650–1875 m. Vouchers: Watuma BM W0203 (EA, HIB), Kabuye CHS 82/155, Mungai G et al. EW2830, Wakanene KM & Mwangangi OM 272, Mbale M et al. NMK 964, Faden RB et al. NMK Exped. 227, 450 & 779, Bally PRO 8794 & 16662, Faden RB, Evans A, Smeenk C 71/1013, Gillett JB, Burtt BL & Osborn RM 17101 (EA).

## F62. CAMPANULACEAE

2 Genera, 5 species

- Lobelia giberroa Hemsl. Habit: Shrub. Habitat: Upland secondary forest, forest edges, streamsides, 1500–2170 m. Vouchers: Kirika P et al. NMK 814, Christenhusz MJM et al. 6659, Faden RB et al. NMK Exped. 88 & 243, Gillett JB, Burtt BL & Osborn RM 17076, Bally PRO 8757, Knox EB 2694 & 2696, Dale IR 3797 (EA).
- Lobelia holstii Engl. Habit: Herb. Habitat: Upland grassland, forest edges, rocky or disturbed places, 1425–2100 m. Vouchers: Watuma BM W0017 (EA, HIB),

- Christenhusz MJM et al. 6631, Beentje HJ 2146, Faden RB et al. NMK Exped. 290 & 438, Drummond RB & Hemsley JH 4303, Hildebrandt JM 2463, Knox EB 2692, 2695 & 2702 (EA).
- Lobelia trullifolia Hemsl. subsp. trullifolia Habit: Herb. Habitat: Upland grassland, forest margins, stream sides, roadsides, 1600–1640 m. Voucher: Faden RB et al. 71/188 (EA).
- Wahlenbergia krebsii Cham. subsp. arguta (Hook.f.) Thulin Habit: Herb. Habitat: Forest margins, upland grassland, ca. 1250 m. Voucher: Wakanene KM & Mwangangi OM 443 (EA).
- Wahlenbergia napiformis (A.DC.) Thulin Habit: Herb. Habitat: Deciduous woodland, grassland, old cultivations, roadsides, ca. 1600 m. Voucher: Beentje HJ et al. NMK Exped. 1141 & 1158 (EA).

#### F63. CANELLACEAE

1 Genus, 1 species

*Warburgia ugandensis* Sprague subsp. *ugandensis* – Habit: Tree. Habitat: Lowland rainforest, secondary bushland and grassland, ca. 1219 m. Vouchers: Kishewitsch S s.n., Stephen K s.n. (EA).

# F64. CANNABACEAE

3 Genera, 4 species

- Celtis africana Burm.f. Habit: Tree. Habitat: Understorey in mist forest, riverine, 1050–1875 m. Vouchers: Mwachala G et al. EW2567, Faden RB et al. NMK Exped. 528 (EA).
- Celtis gomphophylla Baker Habit: Tree. Habitat: Mist forest, by forest streams in valleys, 1170–1850 m. Vouchers: Mwachala G et al. EW3205, Faden RB et al. NMK Exped. 775, Faden RB, Evans A, Msafiri F, Smeenk C 71/58 (EA).
- *Chaetachme aristata* Planch. Habit: Shrub/Tree. Habitat: Lowland and upland forest, 1000–1640 m. Vouchers: Mwachala G et al. EW2579, Medley KE 619 (EA).
- *Trema orientale* (L.) Blume Habit: Tree. Habitat: Upland and lowland rainforest margins, 800–2000 m. Vouchers: SAJIT–005343, Watuma BM W0081 (EA, HIB), Mwachala G et al. EW2573, Faden RB et al. NMK Exped. 398, Beentje HJ et al. NMK Exped. 940, Raler I 0089, Medley KE 629 (EA).

### F65. CAPPARACEAE

6 Genera, 27 species

**Boscia coriacea** Pax – Habit: Tree. Habitat: Deciduous bushland, grassland with scattered trees, 500–690 m. Vouchers: Muasya J et al. KEFRI 82, Ochung HO 63/BE, Medley KE 657, Zùmer M 38, Hildebrandt JM 2478 (EA).

- **Boscia integrifolia J.St.-Hil.** Habit: Tree. Habitat: Deciduous woodland and bushland, 500–1000 m. Vouchers: Muaysa J & Medley KE 655 & 769, Gardner HM 2911 (EA).
- Boscia salicifolia Oliv. Habit: Tree. Habitat: Deciduous woodland and bushland, ca. 900 m. Voucher: Mwachala G et al. EW900 (EA).
- *Cadaba carneoviridis* Gilg & Gilg-Ben. Habit: Shrub. Habitat: Evergreen bushland, grassland with scattered trees, 500–650 m. Vouchers: Medley KE 503, 685, 842 & 876, Ossent JR 113 (EA).
- Cadaba farinosa Forrsk. Habit: Shrub. Habitat: Acacia thornbush, bushland, grassland with scattered trees, 500–650 m. Vouchers: Mwachala G et al. EW198, Drummond RB & Hemsley JH 4250, Ossent J 46, Gillett JB 16872, Medley KE 502 & 838 (EA).
- *Cadaba glandulosa* Forssk. Habit: Shrub. Habitat: Deciduous bushland, grassland with scattered trees. Vouchers: Njoroge T 21, Rauh W s.n. (EA).
- Cadaba linearifolia (J.Graham) M.R.Almeida Habit: Tree. Habitat: Acacia bushland. Vouchers: Greenway PJ & Kanuri 9786, Ossent JR 40 (EA).
- *Cadaba mirabilis* Gilg Habit: Shrub. Habitat: Deciduous bushland and semi-desert scrub, Voucher: Ochung H H012 (EA).
- Cadaba ruspolii Gilg Habit: Shrub. Habitat: Deciduous bushland, grassland with scattered trees. Vouchers: Wamukoya OW 103, Greenway PG & Kanuri 10 (EA).
- *Cadaba stenopoda* Gilg & Gilg-Ben. Habit: Shrub. Habitat: Deciduous bushland, riverine forest, ca. 600 m. Vouchers: Drummond RB & Hemsley JH 4276, Ossent JR 112 (EA).
- Capparis cartilaginea Decne. Habit: Shrub/Tree. Habitat: Deciduous bushland, exposed rocks. Voucher: Ossent JR 702 (EA).
- Capparis erythrocarpos Isert var. rosea (Klotzsch) DeWolf Habit: Liana. Habitat: Deciduous woodland, bushland and secondary scrub, ca. 925 m. Voucher: Mungai GM et al. EW3585 (EA).
- *Capparis fascicularis* DC. var. *fascicularis* Habit: Liana/Shrub. Habitat: Deciduous bushland, grassland with scattered trees, 500–1180 m. Vouchers: Mwachala G et al. EW259, Medley KE 951 (EA).
- Capparis fascicularis DC. var. scheffleri (Gilg & Gilg-Ben.) DeWolf Habit: Shrub. Habitat: Lowland dry evergreen forest, deciduous bushland and secondary scrub. Voucher: Ossent JR 136 (EA).
- Capparis sepiaria L. var. fischeri (Pax) DeWolf Habit: Shrub. Habitat: Deciduous bushland, grassland with scattered trees. Voucher: Gillet JB 19579 (EA).
- Capparis sepiaria L. var. stuhlmannii (Gilg) DeWolf Habit: Shrub. Habitat: Deciduous woodland and bushland, riverine forest. Voucher: Napper D 1469 (EA).
- Capparis tomentosa Lam. Habit: Shrub. Habitat: Deciduous bushland, 500–650 m. Vouchers: SAJIT–005410 (EA, HIB), Medley KE 611, 725 & 762, Gardner N 2923, Bally PRO 8640 (EA).

- *Maerua angolensis* DC. Habit: Shrub/Tree. Habitat: Deciduous bushland and woodland, edges of upland rainforest, 550–1000 m. Vouchers: Medley KE 504b, 827, 871 & 933 (EA).
- *Maerua crassifolia* Forssk. Habit: Tree. Habitat: Deciduous bushland, thicket and semi-desert scrub, 550–650 m. Vouchers: Medley KE 512 & 957, Ossent JR 66 (EA).
- Maerua decumbens (Brongn.) DeWolf Habit: Shrub. Habitat: Deciduous bushland, 550–865 m. Vouchers: Watuma BM W0200 (EA, HIB), Kimeu JM et al. KEFRI 506, Chepkwony & Esilaba 29, Medley KE 857, Bally PRO 13370, Gardner HM 3011, Ossent JR EAH 1092S & 11468 (EA).
- *Maerua denhardtiorum* Gilg Habit: Shrub. Habitat: Deciduous bushland, termite mounds. Voucher: Hucks M 119 (EA).
- Maerua endlichii Gilg & Gilg-Ben. Habit: Shrub. Habitat: Deciduous bushland and grassland with scattered trees or shrubs, 550–650 m. Vouchers: Medley KE 765 & 786, Leuthhold W 89, Gillett JB 16871, Bally J 13392 (EA).
- *Maerua grantii* Oliv. Habit: Shrub. Habitat: Deciduous woodland, bushland, grassland with scattered trees, 450–600 m. Voucher: Bally PRO 13298 (EA).
- *Maerua holstii* Pax Habit: Shrub. Habitat: Deciduous woodland in dry sandy places, 550–650 m. Vouchers: Medley KE 734 & 779, Ossent JR 110 (EA).
- Maerua kirkii (Oliv.) F.White Habit: Shrub. Habitat: High altitude bushland, riverine forest, 600–1180 m. Vouchers: Mwachala G et al. EW286 & 1506, Kokwaro JO 2614, Faden RB & Faden AJ 74/435, Medley KE 848, Bally PRO 8746, Ossent JR 41 & 11470 (EA).
- Maerua triphylla A.Rich. var. calophylla (Gilg) DeWolf Habit: Tree. Habitat: Deciduous and evergreen bushland, riverine forest on rocky ground, 1080–1250 m. Vouchers: Wakanene KM & Mwangangi OM 488, Faden RB & Evans A 71/123 (EA).
- Maerua triphylla A.Rich. var. johannis (Volkens & Gilg) DeWolf Habit: Tree. Habitat: Deciduous bushland, grassland with scattered trees, termite mounds, 650–1371 m. Vouchers: SAJIT–005386 & 005394 (EA, HIB), Kabuye CHS 82/33, Medley KE 578, 599, 685, 731, 739 & 896 (EA).
- *Ritchiea albersii* Gilg Habit: Tree. Habit: Upland rainforest, often at margins, 1000–1875 m. Vouchers: SAJIT–006385, Watuma BM W0132 (EA, HIB), Raler I 0087, Faden RB et al. 71/127 & 72/208, Medley KE 1011 (EA).
- **Thilachium africanum Lour.** Habit: Shrub/Tree. Habitat: Deciduous woodland, bushland and thicket, 550–1180 m. Vouchers: SAJIT–004633 (EA, HIB), Mwachala G et al. EW273, 2591 & 3312, Wakanene KM & Mwangangi OM 713, Medley KE 431, 853 & 964, Joanna B 9017, Gardner HM 2995, Dyson WG 538, Forest Dept. 2995 (EA).
- **Thilachium thomasii** Gilg Habit: Shrub/Tree. Habitat: Deciduous woodland and bushland, 550–1000 m. Vouchers: Mwachala G, Nyaboke B & Matheka K 1031, Kirika 1, Faden RB & Faden AJ 74/235, Agnew ADQ & Part 1 Botany 7341, Mildbraed 17, Murray High School 106, Medley KEM s.n. (EA).

## F66. CARYOPHYLLACEAE

4 Genera, 4 species

- Cerastium lanceolatum (Poir.) Volponi Habit: Herb. Habitat: Forest margins & glades, bushland, roadsides, weed of cultivated areas, 1371–2100 m. Vouchers: Napier ER 1130, Kluguess LM 59, Drummond RB Hemsley JH 4283, Lavranos JJ 11921 (EA).
- *Drymaria cordata* (L.) Willd. ex Roem. & Schult. Habit: Herb. Habitat: Forest and bushland margins, roadsides, cultivated lands, 1160–2170 m. Vouchers: SAJIT–006366, Watuma BM W0107 (EA, HIB), Mwachala G et al. EW3552, Faden RB et al. NMK Exped. 40, 126 & 435, Beentje HJ 2141, Napier ER 1113, Gillett JB, Burtt BL & Osborn RM 17068 (EA).
- *Pollichia campestris* Aiton Habit: Shrub. Habitat: Open woodland, bushland, waste places, ca. 1400 m. Voucher: Gilbert MG 5823 (EA).
- *Silene macrosolen* Steud. ex A.Rich. Habit: Herb. Habitat: Grassland, rocky places, 1430–1829 m. Vouchers: Mungai GM et al. EW3095A, Gardner HM 2952 (EA).

## F67. CELASTRACEAE

8 Genera, 15 species

- *Elaeodendron buchananii* (Loes.) Loes. Habit: Tree. Habitat: Evergreen forest, deciduous woodland, sometimes secondary forest, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 544, Raler I 0126 (EA).
- *Elaeodendron schlechterianum* (Loes.) Loes. Habit: Tree. Habitat: Dry deciduous woodland, fringing forest, 640–1000 m. Vouchers: Medley KE 642, 718, 773, 825, 837 & 1039 (EA).
- *Elaeodendron schweinfurthianum* (Loes.) Loes. Habit: Tree. Habitat: Deciduous and semi-evergreen woodland, 650–1000 m. Vouchers: Watuma BM W0003 (EA, HIB), Medley KE 791 & 915 (EA).
- *Gymnosporia gracilis* Loes. Habit: Shrub. Habitat: Evergreen forest margins, thickets, 600–1402 m. Vouchers: Luke WRQ et al. 5284, Faden RB, Evans A, Msafiri F et al. 70/960, Medley KE 451, 452 & 472, Joanna B 8868 (EA).
- *Gymnosporia heterophylla* (Eckl. & Zeyh.) Loes. Habit: Shrub/Tree. Habitat: 650–1300 m. Vouchers: SAJIT–005351 & 005405 (EA, HIB), Faden RB et al. 71/118, Medley KE 522, 525, 526, 626 & 720 (EA).
- *Gymnosporia putterlickioides* Loes. Habit: Shrub. Habitat: Dry deciduous woodland, wooded grassland often in rocky places, 650–1000 m. Voucher: Medley KE 738 (EA).
- Gymnosporia senegalensis (Lam.) Loes. Habit: Tree. Habitat: Deciduous woodland, thickets and scrub, 650–2170 m. Vouchers: SAJIT–006354 (EA, HIB), Mwachala G et al. EW384, 523, 773, 909, 3145, Mungai GM et al. EW3579, Wakanene KM & Mwangangi OM 460, Faden RB et al. NMK Exped. 122, Medley KE 510, 586 & 636, Hucks M 820 (EA).

- Loeseneriella africana (Willd.) R.Wilczek Habit: Liana. Habitat: Moist evergreen forest, forest margin, riverine forest. 900–1300 m. Vouchers: SAJIT–005393 (EA, HIB), Mungai G et al. EW1406, Hildebrandt JM 2581 (EA).
- Maytenus acuminata (L.f.) Loes. Habit: Tree. Habitat: Understorey and margin of upland of riverine forest, 1605–1902 m. Vouchers: SAJIT–005330 (EA, HIB), Mwachala G, Nyaboke & Saidi S 1044, Faden RB et al. 71/52, Drummond RB & Hemsley JH 4357 (EA).
- *Maytenus undata* (Thunb.) Blakelock Habit: Tree. Habitat: Forest, evergreen bushland and woodland, 800–1050 m. Vouchers: SAJIT–004631 (EA, HIB), Medley KE 717, 748, 803, 866 & 891 (EA).
- *Mystroxylon aethiopicum* (Thunb.) Loes. Habit: Tree. Habitat: Evergreen forest, fringing forest, open woodland. 800–1875 m. Vouchers: Faden RB et al. NMK Exped. 543, Raler I 0128, Medley KE 632, 668, 898 & 932 (EA).
- *Pleurostylia africana* Loes. Habit: Tree. Habitat: Forest margins, deciduous woodland, termite mounds on rocky hillsides, 800–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 612, Mungai GM et al. EW1294 (EA).
- *Pristimera goetzei* (Loes.) R.H.Archer— Habit: Liana. Habitat: Evergreen forest, 1400–1814 m. Vouchers: SAJIT–004515 (EA, HIB), Faden RB et al. NMK Exped. 5, Faden RB & Faden AJ 71/1011, Raler I 0036 (EA).
- *Salacia madagascariensis* (Lam.) DC. Habit: Shrub/Liana. Habitat: Lowland evergreen forest, deciduous woodland, 1350–1450 m. Voucher: SAJIT–005339 (EA, HIB).
- *Salacia stuhlmanniana* Loes. Habit: Shrub/Liana. Habitat: Rainforest, riverine, deciduous woodland, 650–1000 m. Vouchers: Cheseny CMC 72/1, Medley KE 946, 947 & 975 (EA).

## F68. CLEOMACEAE

1 Genus, 6 species

- Cleome briquetii Polhill Habit: Herb. Habitat: Deciduous bushland and thickets on rocky ground, 500–823 m. Vouchers: Napier ER 978, Gillett JB 17231, Polhill RM & Kibuwa SP 958 (EA).
- *Cleome gynandra* L. Habit: Herb. Habitat: Deciduous bushland, waste, disturbed and cultivated lands. Voucher: Hucks M 711 (EA).
- Cleome hirta (Klotzsch) Oliv. Habit: Herb. Habitat: Deciduous bushland and grassland, 550–700 m. Vouchers: Polhill RM & Kibuwa SP 934, Rauh W Ke 57, Ossent JR 24, MacDonald J 866, Hucks M 707 (EA).
- Cleome monophylla L. Habit: Herb. Habitat: Grassland, deciduous woodland and bushland, roadside, disturbed areas, 1371–1580 m. Vouchers: Kabuye CHS 82/112, Napier ER 1102 (EA).
- *Cleome silvatica* Gilg & Gilg-Ben. Habit: Herb. Habitat: Upland rainforest clearings, rocky grasslands & roadsides. Voucher: Gardiner N 2932 (EA).
- Cleome usambarica Pax Habit: Herb. Habitat: Bushland and thicket, streamside, cultivated ground. Voucher: Joanna B 8843 (EA).

# F69. CLUSIACEAE

1 Genus, 1 species

Garcinia volkensii Engl. – Habit: Tree. Habitat: Understorey in evergreen forest, 1000–1900 m. Vouchers: SAJIT–003292 & 005320, Watuma BM W0162 (EA, HIB), Kabuye CHS 82/52, Faden RB et al. NMK Exped. 304 & 400, Beentje HJ et al. NMK Exped. 1115, De BlocK P et al. 243, 299, 316 & 490, Faden RB et al. 71/129, 226, 979 & 77/319, Drummond RB & Hemsley JH 4344, Medley KE 793 & 997, Bally PRO 13624, Gardner HM 2967, Joanna B 9401, Raler I 0026 (EA).

# F70. COMBRETACEAE

2 Genera, 12 species

- Combretum aculeatum Vent. Habit: Shrub. Habitat: Deciduous bushland and woodland, grassy slopes, 580–750 m. Vouchers: Medley KE 457, Faden RB & Faden AJ 74/260, Hooper SS & Townsend CC 1260 (EA).
- Combretum exalatum Engl. Habit: Shrub/Tree. Habitat: Acacia-Commiphora bushland, thicket and wooded grassland, 575–1000 m. Vouchers: Watuma BM W0028 (EA, HIB), Kabuye CHS et al. NMK Exped. 740, Mwachala G et al. EW554, Mungai G et al. EW1767, Kuchar P, Msafiri F & Karime N 5695, Medley KE 1019, Hildebrandt JM 2561 (EA).
- Combretum hereroense Schinz subsp. hereroense Habit: Tree. Habitat: Wooded grassland, Acacia-Commiphora bushland, ca. 700 m. Voucher: Mwachala G et al. EW3298 (EA).
- Combretum hereroense Schinz var. parvifolium (Engl.) Wickens Habit: Tree. Habitat: Acacia-Commiphora bushland, wooded grassland. Voucher: Ossent JR 133 (EA).
- Combretum hereroense Schinz subsp. volkensii (Engl.) Wickens Habit: Shrub/Tree. Habitat: Acacia-Commiphora bushland, wooded grassland, 600–950 m. Vouchers: Mwachala G et al. EW858, Medley KE 547, Ossent JR 145 (EA).
- Combretum molle R.Br. ex G.Don Habit: Tree. Habitat: Wooded grassland and bushland, 600–1250 m. Vouchers: Watuma BM W0008 (EA, HIB), Mwachala G et al. EW220 & 283, Wakanene KM & Mwangangi OM 450, Medley KE 637 & 780, Bally PRO 17123 (EA).
- Combretum mossambicense (Klotzsch) Engl. Habit: Shrub/Tree. Habitat: Deciduous and secondary bushland, wooded grassland, 610–950 m. Vouchers: Mungai G et al. EW1765, Lavranos JJ 12340A, Gardner HM 1198 (EA).
- Combretum psidioides Welw. Habit: Tree. Habitat: Deciduous woodland, rocky hill slopes, ca. 1300 m. Voucher: Mungai G et al. EW1322 (EA).
- *Terminalia brownii* Fresen. Habit: Tree. Habitat: Deciduous woodland, bushland, grassland, riverine forest, 650–1200 m. Vouchers: SAJIT–005367, Watuma BM W0009 (EA, HIB), Mwachala G et al. EW72, 949 & 1556, Wakanene KM & Mwangangi OM 483, Medley KE 419 & 854 (EA).

- *Terminalia kilimandscharica* Engl. Habit: Tree. Habitat: Deciduous woodland, bushland and wooded grassland, rocky outcrops, 548–1200 m. Vouchers: Greenway PJ & Kanuri K 12779, Small R 823 (EA).
- Terminalia orbicularis Engl. & Diels Habit: Tree. Habitat: Acacia-Commiphora bushland, 520–914 m. Vouchers: Faden RB & Faden AJ 74/245 & 515, Dale IR 3896, Agnew ADQ & Part 1 Botany 7316, Verdcourt B Ke19, Rauh W 12521, Ossent JR 147 & 1195 (EA).
- *Terminalia parvula* Pamp. Habit: Shrub/Tree. Habitat: *Acacia-Commiphora* bushland, 426–853 m. Vouchers: Greenway PJ & Kanuri K 12641 & 12919 (EA).
- *Terminalia prunioides* M.A.Lawson Habit: Shrub/Tree. Habitat: *Acacia-Commiphora* and *Acacia-Combretum* bushland, 550–1067 m. Vouchers: Mwachala G et al. EW975, Mungai GM et al. EW1769, Musya J & Safary 28, Faden RB & Faden AJ 74/473, Medley KE 427, 652 & 841, Napier ER 897, Dale IR 2005, Ossent JR 158, Greenway PJ & Kanuri K 12640, Mr & Mrs Hucks HP 318 (EA).
- *Terminalia spinosa* Engl. Habit: Tree. Habitat: *Acacia-Commiphora* bushland, 500–620 m. Vouchers: Medley KE 710, 759 & 840, Bally PRO 17121 (EA).

## F71. CONNARACEAE

2 Genera, 2 species

- Agelaea pentagyna (Lam.) Baill. Habit: Liana. Habitat: Upland rainforest, riparian forest, 1275–1850 m. Vouchers: SAJIT–006383 (EA, HIB), Mwachala G et al. EW1869, Drummond RB & Hemsley JH 4367, Bally PRO 8783, Joanna B 9079, Beentje HJ et al. NMK Exped. 866 & 1014, Raler I 0137 (EA), Faden RB et al. 71/44 (EA).
- *Rourea thomsonii* (Baker) Jongkind Habit: Liana. Habitat: Montane forest remnants, upland rainforest, 1400–2000 m. Vouchers: Watuma BM W0143 (EA, HIB), Drummond RB & Hemsley JH 4337 & 4375, Joanna B 8998 (EA).

## F72. CONVOLVULACEAE

7 Genera, 19 species

- Astripomoea hyoscyamoides (Vatke) Verdc. var. hyoscyamoides Habit: Subshrub. Habitat: Deciduous bushland, roadside, cultivated or disturbed ground, ca. 600 m. Voucher: Hucks M 576 (EA).
- Cuscuta planiflora Ten. var. holstii Baker & Rendle Habit: Climber. Habitat: On herbs in grasslands, ca. 1710 m. Voucher: Gardner HM 2964 (EA).
- *Hildebrandtia sepalosa* Rendle Habit: Shrub. Habitat: *Acacia-Commiphora-Euphorbia-Sanseveria* bushland, 500–650 m. Vouchers: Faden RB & Faden AJ 74/461, Ossent JR 10, 50 & 54, Lubai IK HB20 (EA).
- *Ipomoea biflora* (L.) Pers. Habit: Climber. Habitat: Dry bush, woodland, grassland, cultivated lands, 1056 m. Voucher: Watuma BM W0158 (EA, HIB).
- *Ipomoea bullata* Oliv. Habit: Climber. Habitat: Dry bushland, 548–914 m. Vouchers: Joanna B 8877, Ossent JR 126, Bally PRO 74 & 8613, Rauh W 840 (EA).

- *Ipomoea eriocarpa* R.Br. Habit: Climber. Habitat: Grassland, hedgerows, cultivated lands, ca. 610 m. Voucher: Napier ER 1049 (EA).
- *Ipomoea hartmannii* Vatke Habit: Herb. Habitat: *Acacia-Commiphora* deciduous bushland, 600–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 603, Verdcourt B & Polhill RM 2763, Hildebrandt JM 2564, Ossent JR 10952 (EA).
- *Ipomoea hildebrandtii* Vatke subsp. *hildebrandtii* Habit: Shrub. Habitat: *Acacia-Commiphora* deciduous bushland, 914–1371 m. Vouchers: Watuma BM W0151 (EA, HIB), Napier ER 1078, Bally PRO 8117, Verdcourt B & Polhill RM 2739 & 2744, Irwin PH 156 (EA).
- *Ipomoea involucrata* P.Beauv. Habit: Herb. Habitat: Forest, secondary forest, abandoned cultivations, 2000–2170 m. Vouchers: SAJIT–006360 (EA, HIB), Faden RB et al. NMK Exped. 120, Gillett JB et al. 17096 (EA).
- *Ipomoea kituiensis* Vatke var. *kituiensis* Habit: Herb/Climber. Habitat: Deciduous bushland and woodland, 650–950 m. Vouchers: Watuma BM W0001 (EA, HIB), Mwachala G et al. EW847, Medley KE 420 (EA).
- *Ipomoea mombassana* Vatke var. *mombassana* Habit: Climber. Habitat: *Commiphora*, *Combretum* bushland and woodland, secondary bushland, ca. 610 m. Vouchers: Ossent JR 11003, Jeffrey GW 815 (EA).
- *Ipomoea ochracea* (Lindl.) G.Don Habit: Climber. Habitat: Forest clearings, thickets, rocky places, ca. 950 m. Voucher: Mwachala G et al. EW766 (EA).
- *Ipomoea pes-tigridis* L. var. *pes-tigridis* Habit: Climber. Habitat: Grassland, bushland and plantations, ca. 610 m. Voucher: Napier ER 970 (EA).
- *Ipomoea pes-tigridis* L. var. *longibracteata* Vatke Habit: Climber. Habitat: Deciduous bushland and thickets. Vouchers: Hildebrandt JM 2420, Bally PRO 8801 (EA).
- *Ipomoea* sp. A of FTEA Habit: Climber. Habitat: Woodland, ca. 866 m. Voucher: Mwachala G, Nyaboke B & Matheka K 1059 (EA).
- *Ipomoea stenosiphon* Hallier f. Habit: Liana. Habitat: *Acacia-Commiphora* deciduous bushland, rocky areas, ca. 1219 m. Voucher: Napier ER 1125 (EA).
- *Ipomoea wightii* (Wall.) Choisy var. *kilimandschari* (Dammer) Verdc. Habit: Climber. Habitat: Open forest and scrub, 800–1550 m. Vouchers: Kabuye CHS et al. NMK Exped. 613, Mwachala G et al. EW3055A, Beentje HJ et al. NMK Exped. 845, Klungness LM 5 (EA).
- *Lepistemon owariensis* (**P.Beauv.**) Hallier f. Habit: Climber. Habitat: Rainforest, riverine forest, 1100–1220 m. Vouchers: Mwachala G et al. EW2572, Napier ER 1138 (EA).
- Metaporana densiflora (Hallier f.) N.E.Br. Habit: Liana. Habitat: Secondary evergreen bushland, abandonded cultivated ground, 650–1000 m. Vouchers: Kimeu JM, Meso M & Wafula A KEFRI 507, Medley KEM 636 (EA).
- Stictocardia incomta (Hallier f.) Hallier f. Habit: Climber. Habitat: Terminalia-Combretum-Acacia bushland on rocky slopes, 500–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 613, Hucks M 1074 (EA).

# F73. CRASSULACEAE

3 Genera, 13 species

- Cotyledon barbeyi Schweinf. ex Baker Habit: Herb. Habitat: Rocky slopes, termite mounds in Acacia bushland, 1000–1330 m. Vouchers: Mungai GM et al. EW3092A, Bally PRO 13404 (EA).
- Crassula alata (Viv.) A.Berger subsp. pharnaceoides (Fisch. & C.A.Mey.) Wickens & Bywater Habit: Herb. Habitat: Moist rock crevices, stream banks, ca. 1600 m. Voucher: Mwachala G et al. EW3136 (EA).
- Crassula alba Forssk. Habit: Herb. Habitat: Rock crevices and rocky outcrops, 1270–1600 m. Vouchers: Mwachala G et al. EW3158, Beentje HJ et al. NMK Exped. 1139 (EA).
- Crassula alsinoides (Hook.f.) Engl. Habit: Herb. Habitat: Upland forest margins, moist grounds, streams, 1700–1950 m. Vouchers: SAJIT–004543 & 006405 (EA, HIB), Faden RB et al. NMK Exped. 899, Gillett JB & Burtt BL 17066, Mwachala G s.n. (EA).
- *Crassula globularioides* Britten Habit: Herb. Habitat: Rock crevices. Vouchers: Bally PRO 13525, Joanna B 9062 (EA).
- Crassula schimperi Fisch. & C.A.Mey. subsp. phyturus (Mildbr.) R.Fern. Habit: Herb. Habitat: Rocks in upland forest and grassland, 1400–1640 m. Voucher: Faden RB et al. NMK Exped. 2 (EA).
- Crassula schimperi Fisch. & C.A.Mey. subsp. schimperi Habit: Herb. Habitat: Moist rocks, rock crevices, epiphyte on tree trunks, ca. 1800 m. Voucher: Kabuye CHS 82/61 (EA).
- Crassula volkensii subsp. coleae (Baker) Wickens & Bywater Habit: Herb. Habitat: Moist thicket, volcanic rock crevices, 980–1371 m. Vouchers: Mungai GM et al. EW2650, Faden RB & Faden AJ 74/486, Napier ER 756 (EA).
- Crassula volkensii Engl. subsp. volkensii Habit: Herb. Habitat: Shady rocky ground, 950–2000 m. Vouchers: Kabuye CHS 82/65, Mwachala G et al. EW1274, Luke WRQ & Luke PA 6413, Wakanene KM & Mwangangi OM 324, Bally PRO 13414, Gardner HM 3013 (EA).
- *Kalanchoe* × *auriculata* (Raadts) V.V.Byalt Habit: Herb. Habitat: Dense or open bushland on rocky slopes, ca. 914 m. Voucher: Magius in EA Polhill RM 404 (EA).
- *Kalanchoe densiflora* Rolfe Habit: Herb. Habitat: Upland rainforest margins, glades and riverbanks, 1450–1800 m. Vouchers: Kabuye CHS 82/106, Wakanene KM & Mwangangi OM 236 & 641, Bytebier B 1280, Faden RB et al. NMK Exped. 495 (EA).
- *Kalanchoe lateritia* Engl. Habit: Herb. Habitat: Deciduous and semi-deciduous woodland and forest, 760–1150 m. Vouchers: Kabuye CHS et al. NMK Exped. 651, Mungai G et al. EW2659, Faden RB & Faden AJ 74/535, Faden RB, Evans A & Githui M 70/150 (EA).
- *Kalanchoe miniata* Hilsenb. & Bojer ex Tul. Habit: Herb. Habitat: Wooded grassland, bushland and scrub, ca. 1060 m. Voucher: Bally PRO 13533 (EA).

- *Kalanchoe nyikae* Engl. Habit: Herb. Habitat: Deciduous bushland, 760–1040 m. Vouchers: Mungai GM et al. EW2657, Faden RB et al. 70/151 (EA).
- *Kalanchoe prittwitzii* Engl. Habit: Herb. Habitat: Forest, open bush and grassland, ca. 1350 m. Voucher: Mwachala G et al. EW2666 (EA).

# F74. CUCURBITACEAE

13 Genera, 29 species

- Citrullus lanatus (Thunb.) Matsum. & Nakai Habit: Climber. Habitat: Grassland and bushland, old plantations and cultivation, 610–1150 m. Voucher: Ogola B & Mwangangi OM et al. 25 & 26 (EA), Napier ER 1048 (EA).
- Coccinia grandiflora Cogn. Habit: Climber. Habitat: Upland rainforest, 1425–1850 m. Vouchers: Watuma BM W0209 (EA, HIB), Faden RB et al. NMK Exped. 423 & 799, Beentje HJ et al. NMK Exped. 879, Bally 13759 (EA).
- Coccinia grandis (L.) Voigt Habit: Climber. Habitat: Deciduous bushland, woodland & wooded grassland, riverine, 600–1250 m. Vouchers: Beentje HJ et al. NMK Exped. 423, Muchelle WN HB 16/94, Sanganyi SK HB 14, Joanna B 8929 (EA).
- Coccinia microphylla Gilg Habit: Climber. Habitat: Deciduous dry bushland and Combretum wooded grassland, ca. 950 m. Vouchers: Mungai GM et al. EW1318 & 1319 (EA).
- Coccinia trilobata (Cogn.) C.Jeffrey Habit: Climber. Habitat: Wooded grassland, deciduous bushland, 685–823 m. Vouchers: SAJIT–005338 (EA, HIB), Polhill RM & Kibuwa SP 962, Verdcourt B 3888 (EA).
- *Corallocarpus epigaeus* (Rottler) Hook.f. Habit: Climber. Habitat: Margins of upland forest, wooded grassland, deciduous bushland, 600–800 m. Vouchers: Verdcourt B 1111 (EA), Hucks M 554 (EA).
- Cucumis dipsaceus Ehrenb. ex Spach Habit: Climber. Habitat: Bushland, woodland, wooded grassland, weed of cultivation, 610–1540 m. Vouchers: Wakanene KM & Mwangangi OM 331, Bernard O & Mwangangi OM et al. 8, 21 & 23, Napier ER 967 (EA).
- Cucumis ficifolius A.Rich. Habit: Climber: Habitat: Upland grassland, 1250–1600 m. Vouchers: Beentje HJ et al. NMK Exped. 1154, Greenway PJ 8951 (EA).
- Cucumis maderaspatanus L. Habit: Climber. Habitat: Riverine margins, seasonal swamps, damp woodland and bushland. Vouchers: Lubai IK HB13, Muchelle WN HB14/94 (EA).
- **Diplocyclos palmatus** (L.) C.Jeffrey Habit: Climber. Habitat: Rain and ground water forest, seasonal swamp grasslands, ca. 1170 m. Voucher: Mwachala G et al. EW3208 (EA).
- NE Gerrardanthus grandiflorus Cogn. Habit: Herb. Habitat: Upland and lowland rainforest, 640–1850 m. Vouchers: SAJIT–004628 (EA, HIB), Luke WRQ & Luke PA 16118, Faden RB et al. NMK Exped. 1121B & 1216, Faden RB & Faden AJ 74/234 (EA). Near Threatened.

- Gerrardanthus lobatus (Cogn.) C.Jeffrey Habit: Climber. Habitat: Deciduous bushland, woodland and wooded grassland. 600–850 m. Vouchers: Mwachala G et al. EW3307, Faden RB & Faden AJ 74/446, Polhill RM & Kibuwa SP 939, Archer PG 567 (EA).
- *Kedrostis foetidissima* (Jacq.) Cogn. Habit: Climber. Habitat: Rainforest margins, semi-evergreen woodland and bushland, wooded grassland, 600–950 m. Vouchers: Watuma BM W0173 (EA, HIB), Mwachala G et al. EW262, 1171 & 1225, Verdcourt B 3887, Napier ER 922, Hucks M 795 (EA).
- *Kedrostis leloja* (J.F.Gmel.) C.Jeffrey Habit: Climber. Habitat: Deciduous bushland, thicket woodland, 600–700 m. Vouchers: Ossent JR 118, Hucks M 560 (EA).
- *Kedrostis pseudogijef* (Gilg) C.Jeffrey Habit: Liana. Habitat: Deciduous bushland and woodland, 609–800 m. Vouchers: Faden RB & Faden AJ 74/253, Drummond RB & Hemsley JH 4414, Verdcourt B 3888A, Gardner HM 2587, Hucks M 444 (EA).
- Lagenaria sphaerica (Sond.) Naudin Habit: Climber. Habitat: Riverine, ground water forest, old cultivations, 1000–1665 m. Vouchers: Watuma BM W0117 (EA, HIB), Mwachala G et al. EW267, Ogola B & Mwangangi OM 3, Napier ER 969, Joanna B et al. 9104 (EA).
- Momordica boivinii Baill. Habit: Climber. Habitat: Deciduous bushland and woodland, 998–1370 m. Vouchers: SAJIT–004626 (EA, HIB), Kabuye CHS 82/8 & 144, Mwachala G et al. EW3162, Mungai GM et al. EW3170 & 3583, Cheseny CMC 72/3, Napier ER 1095, Joanna B 9100, Fleuret A 7 (EA).
- *Momordica calantha* Gilg Habit: Climber. Habitat: Secondary forest undergrowth and margins on steep rocky hill, 1550–1580 m. Voucher: Watuma BM W0257 (EA, HIB).
- Momordica foetida Schumach. Habit: Climber. Habitat: Forest edges and clearings, riverine forests, secondary thickets, 1270–1814 m. Vouchers: SAJIT–006409, Watuma BM W0118 (EA, HIB), Mwachala G et al. EW3193 & 3203, Ogola B & Mwangangi OM et al. 23 (EA).
- *Momordica friesiorum* (Harms) C.Jeffrey Habit: Climber. Habitat: Upland rainforest, margins and clearings, 1851–2170 m. Vouchers: SAJIT–006368 (EA, HIB), Faden RB et al. NMK Exped. 121 (EA).
- Momordica rostrata Zimm. Habit: Climber. Habitat: Deciduous bushland, thicket, woodland and wooded grassland, 579–1039 m. Vouchers: Watuma BM W0312 (EA, HIB), Mwachala G et al. EW265, Muasya J et al. KEFRI 78, Verdcourt B & Polhill RM 2736, Ossent JR 27 & 45, Napier ER 1023 (EA).
- *Momordica spinosa* (Gilg) Chiov. Habit: Shrub/Climber. Habitat: Deciduous bushland, 420–600 m. Vouchers: Faden RB & Faden AJ 74/285, Napier ER 1026, Hucks M 698 & 876, Joanna B 9070 (EA).
- Oreosyce africana Hook.f. Habit: Climber. Habitat: Disturbed rainforests, edges and clearings, 1500–2170 m. Vouchers: SAJIT–004525 (EA, HIB), Faden RB et al. NMK Exped. 95, Beentje HJ et al. NMK Exped. 926, Joanna B 9103 (EA).

- **Peponium vogelii** (Hook.f.) Engl. Habit: Climber. Habitat: Upland rainforest, ground water forest, woodland and bushland near open water, 750–1875 m. Vouchers: SAJIT–006394, Watuma BM W0209 & W0267 (EA, HIB), Faden RB et al. NMK Exped. 221 & 463, Gillett JB 17230 (EA).
- *Trochomeria macrocarpa* (Sond.) Hook.f. Habit: Climber. Habitat: Deciduous woodland and bushland, 859–1200 m. Vouchers: SAJIT–006420 (EA, HIB), Mwachala G et al. EW1443, Joanna B & Opiko 9122 (EA).
- **Zehneria emirnensis (Baker) Keraudren** Habit: Climber. Habitat: Rainforest, 1700–1875 m. Vouchers: Gillett JB, Burtt BL & Osborn RM 17103 (EA), Faden RB et al NMK Exped 259 (EA).
- Zehneria scabra (L.f.) Sond Habit: Climber. Habitat: Rainforest, moist places in deciduous bushland, roadside, cultivations, 1115–2000 m. Vouchers: Watuma BM W0265 (EA, HIB), Mungai GM et al. EW1320, Luke WRQ & Luke PA et al. 5306 & 5385, Drummond RB & Hemsley JH 4326, Klungness LM 41 (EA).
- **Zehneria oligosperma C.Jeffrey** Habit: Climber. Habitat: Rainforest, moist places in deciduous bushland, 1800–1950 m. Voucher: Drummond RB & Hemsely JH 4333 (EA).
- <sup>E</sup>Zehneria tuberifera G.W.Hu & Q.F.Wang Habit: Climber. Habitat: Understorey and at forest edges of moist forests, 1700–1950 m. Vouchers: SAJIT–006350, Watuma BM W0044, W0298 & W0299 (EA, HIB), Faden RB et al. NMK Exped. 553 (EA).

## F75. DICHAPETALACEAE

1 Genus, 2 species

- NE Dichapetalum eickii Ruhland Habit: Liana. Habitat: Upland wet evergreen forest, 1400–1875 m. Vouchers: SAJIT–005327 (EA, HIB), Kabuye CHS 84/73, Mwachala G & Nyaboke 1042, Breteler FJ 7508, Christenhusz MJM et al. 6635, Faden RB et al. NMK Exped. 324 & 489, Beentje HJ et al. NMK Exped. 951, Faden RB et al. 71/21 & 891, Drummond RB & Hemsley JH 4330, Raler I 0097 (EA).
- *Dichapetalum ruhlandii* Engl. Habit: Liana. Habitat: Forest, secondary regrowth on rocky sites, bushland, 1500–1600 m. Vouchers: Watuma BM W0137 (EA, HIB), Breteler FJ 7506, Bally PRO 8775 (EA).

## F76. DIDIEREACEAE

1 Genus, 1 species

*Calyptrotheca taitense* (Pax & Vatke) Brenan – Habit: Shrub. Habitat: Deciduous bushland, open woodland and grassland with *Acacia*, 500–650 m. Vouchers: Medley KE 877, Hilderbrandt JM 2577 (EA).

# F77. EBENACEAE

2 Genera, 7 species

- *Diospyros abyssinica* (Hiern) F.White subsp. *abyssinica* Habit: Tree. Habitat: Fringing and dry evergreen forest, open montane bushland and woodland, 900–1875 m. Vouchers: Christenhusz MJM et al. 6660, Faden RB et al. NMK Exped. 241, Kimuzi D 4, Medley KE 675, Raler I 0056 (EA).
- *Diospyros consolatae* Chiov. Habit: Shrub/Tree. Habitat: Evergreen dry forest, *Acacia, Terminalia, Combretum* woodland, 600–1200 m. Vouchers: SAJIT–005401 (EA, HIB), Kabuye CHS et al. NMK Exped. 626, Wakanene KM & Mwangangi OM 523, Medley KE 430 & 847, Dale IR 3883 (EA).
- *Diospyros mespiliformis* Hochst. ex A.DC. Habit: Tree. Habitat: Fringing forest, *Combretum* woodland, deciduous bushland, 550–650 m. Voucher: Medley KE 460 (EA).
- *Diospyros natalensis* (Harv.) Brenan Habit: Tree. Habitat: Moist semi-deciduous forest, 650–1400 m. Vouchers: Faden RB et al. 71/136, Medley KE 892, Joanna B 8865 (EA).
- *Diospyros zombensis* (B.L.Burtt) F.White Habit: Tree. Habitat: *Euphorbia*, *Terminalia*, *Combretum* and *Acacia* woodland, rocky slopes, 800–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 624, Joanna B 8766 (EA).
- Euclea divinorum Hiern Habit: Shrub/Tree. Habitat: Evergreen forest margins on rocky slopes, secondary forest, open bushland, 450–1900 m. Vouchers: Mwachala G et al. EW509, 1246 & 3254, Mungai GM et al. EW1430, Wakanene KM & Mwangangi OM 451, Christenhusz MJM et al. 6681, Medley KE 471, 615 & 912, Bally PRO 13297 (EA).
- *Euclea racemosa* L. subsp. schimperi (A.DC.) F.White Habit: Shrub/Tree. Habitat: Bushland, grassland with scattered trees, 550–650 m. Vouchers: Medley KE 435 & 763 (EA).

## F78. ERICACEAE

2 Genera, 3 species

- Agarista salicifolia (Lam.) G.Don Habit: Tree. Habitat: Forest remnants and margins, 1400–2170 m. Vouchers: SAJIT–004576 (EA, HIB), Wakanene KM & Mwangangi OM 664, Faden RB et al. NMK Exped. 31 & 92, Joanna B 9091, Faden RB et al. 70/573, Gardner HM R2977 (EA).
- *Erica arborea* L. Habit: Shrub. Habitat: Above forest on mountains, open forest especially in rocky areas, 1450–1750 m. Vouchers: Wakanene KM & Mwangangi OM 312 & 637 (EA).
- *Erica mannii* (Hook.f.) Beentje subsp. *usambarensis* (Alm & T.C.E.Fr.) Beentje Habit: Shrub. Habitat: Rocky forest edges, hill forest clearings and secondary association, 1000–2170 m. Vouchers: Mungai GM et al. EW3559, Faden RB et al.

NMK Exped. 27 & 107, Medley KE 1018, Gillett JB et al. 17095, Raler I 0070, Joanna B 8874 (EA).

#### F79. ERYTHROXYLACEAE

1 Genus, 1 species

*Erythroxylum emarginatum* Thonn. – Habit: Shrub/Tree. Habitat: Evergreen and mist forest, 900–1875 m. Vouchers: SAJIT–005417 (EA, HIB), Faden RB, Evans A & Githui M 70/178, Faden RB et al. NMK Exped. 516, Medley KE 475, 623, 645 & 908, Dale IR 3822 (EA).

# F80. EUPHORBIACEAE

13 Genera, 55 species

- Acalypha fruticosa Forssk. var. eglandulosa Radcl.-Sm. Habit: Shrub. Habitat: Montane forest and associated woodland, deciduous bushland, 580–1776 m. Vouchers: Mwachala G et al. EW29, Medley KE 983, Christenhusz MJM et al. 6637 (EA).
- Acalypha paniculata Miq. Habit: Herb. Habitat: Forests, clearings and edges, disturbed areas, ca. 1250 m. Voucher: Mwachala G et al. EW2582 (EA).
- Acalypha volkensii Pax Habit: Subshrub. Habitat: Forest undergrowth, edges and associated bushland, montane woodland, 650–1750 m. Vouchers: Watuma BM W0226 (EA, HIB), Wakanene KM & Mwangangi OM 306 & 562, Faden RB et al. NMK Exped. 30, Medley KE 994, Mbale M et al. NMK 960 (EA).
- Argomuellera macrophylla Pax Habit: Subshrub. Habitat: Forest undergrowth, 1425–1850 m. Vouchers: Beentje HJ et al. NMK Exped. 1043, Gardner 2948, Raler I 0091 (EA).
- Croton dichogamus Pax Habit: Shrub/Tree. Habitat: Dry forest, bushland and thicket, 970–1150 m. Vouchers: Mwachala G et al. EW208, Mungai GM et al. EW2652, Greenway PJ & Kanuri K 12825, Morawetz JJ 406, Hucks M 915 (EA).
- *Croton macrostachyus* Hochst. ex Delile Habit: Tree. Habitat: Secondary forests and forest edges, 1250–1550 m. Vouchers: Mwachala G et al. 1257, Beentje HJ et al. NMK Exped. 852 (EA).
- Croton megalocarpus Hutch. Habit: Tree. Habitat: Evergreen forest, 1644–2000 m. Vouchers: Watuma BM W0261 (EA, HIB), Wakanene KM & Mwangangi OM 77, Faden RB et al. NMK Exped. 527, Raler I 0062 (EA).
- *Croton menyharthii* Pax Habit: Shrub. Habitat: Deciduous bushland and thicket, 550–650 m. Voucher: Medley KE 544b (EA).
- Croton pseudopulchellus Pax Habit: Shrub. Habitat: Dry evergreen forest, deciduous woodland, bushland and thicket, 550–1110 m. Vouchers: SAJIT–005414 (EA, HIB), Mwachala G et al. EW1289, Mungai GM et al. EW1372, Faden RB & Faden AJ 74/483, Medley KE 545, 722 & 754, Joanna B 8835 (EA).

- Croton sylvaticus Hochst. Habit: Tree. Habitat: Forest edges and secondary forests, 1700–1875 m. Vouchers: Watuma BM W0284, Faden RB et al. NMK Exped. 546 (EA).
- *Erythrococca bongensis* Pax Habit: Shrub. Habitat: Forest edges and associated bushland along rivers, 650–1000 m. Voucher: Medley KE 694 (EA).
- *Erythrococca kirkii* (Müll.Arg.) Prain Habit: Shrub. Habitat: Bushland and thicket along streams, ca. 1050 m. Vouchers: Watuma BM W0152 (EA, HIB), Bally PRO 12694 (EA).
- *Euphorbia bicompacta* Bruyns Habit: Tree. Habitat: Open deciduous bushland and woodland on rocky slopes, 800–1826 m. Vouchers: Watuma BM W0104 (EA, HIB), Luke WRQ et al. 5344, Medley KE 965, Beentje HJ et al. NMK Exped. 743, Napier ER 1322 (EA).
- *Euphorbia breviarticulata* Pax var. *breviarticulata* Habit: Shrub. Habitat: Dry open *Acacia-Commiphora* bushland, 465–600 m. Vouchers: Kirika P, Kamau P & Ndiege C GBK 44, Leach LC & Bayliss R 10241 (EA).
- Euphorbia buruana Pax Habit: Herb. Habitat: Open Acacia-Commiphora bushland, 500–1150 m. Vouchers: Engler 1930a (EA), Bally C 14138 (EA), Bally PRO 13407 (EA), Morawets JJ & Wabuyele E 405 (EA), Leach LC 10301 (EA).
- *Euphorbia bussei* Pax var. *bussei* Habit: Tree. Habitat: Open deciduous bushland, rocky slopes, sandy soils, ca. 953 m. Voucher: Mwachala G, Nyaboke, Saidi S 1033 (EA). Endangered.
- Euphorbia bussei Pax var. kibwezensis (N.E.Br.) S.Carter Habit: Tree. Habitat: Deciduous woodland, steep rocky slopes, 570–1067 m. Vouchers: Mwachala G et al. EW501, Morawets JJ & Wabuyele E 400, Dyson WG 537, Leach LC et al. 10299, Bally PRO 14158, 14210, 14211 & 14214, Baslev H 50, Robertson SA 6774, Polhill RM & Paulo S 472 (EA).
- Euphorbia classenii P.R.O.Bally & S.Carter Habit: Shrub. Habitat: Exposed rock faces with deciduous woodland, 700–800 m. Vouchers: Luke WRQ & Luke PA 4169, Classen SA 70 (EA).
- *Euphorbia crotonoides* Boiss. subsp. *crotonoides* Habit: Herb. Habitat: Open woodland, scattered bushland, ca. 874 m. Voucher: Watuma BM W0178 (EA, HIB).
- *Euphorbia cryptospinosa* P.R.O.Bally Habit: Shrub. Habitat: Open dry deciduous bushland, 426–600 m. Vouchers: Gillett JB 21004, Hucks M 604, Greenway PJ & Kanuri K 12665 & 13021 (EA).
- *Euphorbia cuneata* Vahl subsp. *spinescens* (Pax) S.Carter Habit: Shrub. Habitat: Dry sandy soils in open *Acacia-Commiphora* bushland, 460–750 m. Vouchers: Geldermalsen-de Jongh, E van 131, Hucks M 842, Bally PRO 13444, Morawetz JJ & Wabuyele E 408 (EA).
- Euphorbia cuneata Vahl var. pumilans S.Carter Habit: Shrub. Habitat: Grasslands, open Acacia-Commiphora bushland, 950–1400 m. Vouchers: Gillett JB 19589, Bally PRO 13412 & 13812, Gilbert MG 5818 (EA).

- Euphorbia engleri Pax Habit: Shrub. Habitat: Forest undergrowth and dense bushland, 1425–2164 m. Vouchers: Watuma BM W0089 (EA, HIB), Kabuye CHS 82/75, Mwachala G & Nyaboke 1041, Wakanene KM & Mwangangi OM 41, Christenhusz MJM et al. 6627, Faden RB et al. NMK Exped. 206, 380 & 557, Faden RB & Faden AJ 71/1027 & 77/ 338, Beentje HJ 2129, Drummond RB & Hemsley JH 4359, Gillett JB et al. 17105, Heller E s.n. (EA).
- NE Euphorbia furcata N.E.Br. Habit: Herb. Habitat: Acacia bushland in dry rocky sandy soils, ca. 700 m. Voucher: Luke WRQ & Luke PA 4180 (EA). Vulnerable.
- *Euphorbia guentheri* (Pax) Bruyns Habit: Herb. Habitat: Amongst grass in open scrubland, 915–1000 m. Vouchers: Bally PRO E92 & 13405, Uhlig C 48 (EA).
- *Euphorbia heterochroma* Pax subsp. *heterochroma* Habit: Shrub. Habitat: *Acacia-Commiphora* bushland, 600–900 m. Voucher: Lubai IK HB23 (EA).
- *Euphorbia heterochroma* Pax subsp. *tsavoensis* S.Carter Habit: Shrub. Habitat: Deciduous bushland, rocky outcrops, 650–1000 m. Vouchers: Morawetz JJ & Wabuyele E 402, Bally PRO 13351, Hucks M 978, Medley KEM p.r. (EA).
- *Euphorbia ingens* E.Mey. ex Boiss. Habit: Tree. Habitat: Open wooded grasslands, rocky slopes, 550–1000 m. Voucher: Medley KE p.r. (EA).
- NE Euphorbia neoglaucescens Bruyns Habit: Shrub. Habitat: Dry deciduous woodland, rocky slopes, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 743 (EA).
- *Euphorbia nyikae* Pax ex Engl. var. *neovolkensii* (Pax) S.Carter Habit: Tree. Habitat: Open deciduous woodland, *Commiphora* scrub, 570–900 m. Vouchers: Polhill RM & Kibuwa SP 472, Balslev H 50, Dyson WG 537 (EA).
- NE Euphorbia petricola P.R.O.Bally & S.Carter Habit: Herb. Habitat: Dry Acacia-Commiphora forest on rocky hillside, ca. 1050 m. Voucher: Luke WRQ & Luke PA 6448 (EA). Endangered.
- *Euphorbia polyacantha* Boiss. Habit: Herb. Habitat: Shrub. Habitat: *Commiphora-Sansevieria* bushland thicket, ca. 520 m. Voucher: Faden RB & Faden AJ 74/477 (EA).
- *Euphorbia polyantha* Pax Habit: Subshrub. Habitat: Dry deciduous bushland on sandy stony soils, ca. 540 m. Voucher: Gillett JB 17211 (EA).
- *Euphorbia pseudomollis* Bruyns Habit: Tree. Habitat: Open deciduous woodland on slopes, succulent thicket, 700–900 m. Vouchers: Luke WRQ & Luke PA 6432, Bally PRO 12725, Leach LC & Bayliss R 10258 (EA).
- *Euphorbia quinquecostata* Volkens Habit: Tree. Habitat: Mixed deciduous woodland on rocky hillsides, 650–1000 m. Vouchers: Verdcourt B 3891, Bally PRO 8658, Dyson WG 536 (EA).
- *Euphorbia robecchii* Pax Habit: Tree. Habitat: Open *Acacia-Commiphora* bushland, 457–650 m. Vouchers: Morawetz JJ & Wabuyele E 409, Greenway PJ & Kanuri K 12831, Bally PRO E15, Leach LC & Bayliss B 10225, Medley KE p.r. (EA).
- Euphorbia scheffleri Pax Habit: Subshrub. Habitat: Open Acacia-Commiphora bushland on sandy stony soils, 640–1000 m. Vouchers: Medley KE 521, Polhill

- RM & Kibuwa SP 933, Drummond RB & Hemsley JH 4415, Gillett JB 17207 (EA).
- *Euphorbia schimperiana* Scheele var. *pubescens* (N.E.Br.) S.Carter Habit: Shrub. Habitat: Forest clearings and edges, in grass, ca. 1000 m. Voucher: Mwachala G et al. EW2564 (EA).
- \**Euphorbia serpens* Kunth Habit: Shrub. Habitat: Roadsides, ca. 560 m. Voucher: Bally PRO 13250 (EA).
- *Euphorbia systyloides* Pax Habit: Herb. Habitat: Open woodland, disturbed sites in grass, ca. 970 m. Voucher: Mwachala G et al. EW20 (EA).
- *Euphorbia tenuispinosa* Gilli var. *robusta* P.R.O.Bally & S.Carter Habit: Herb. Habitat: Dry deciduous bushland in rock sandy soils, 550–800 m. Voucher: Luke WRQ et al. 4256, Medley KEM p.r. (EA).
- *Euphorbia tenuispinosa* Gilli var. *tenuispinosa* Habit: Herb. Habitat: *Acacia-Commiphora* bushland, open evergreen forest, 609–1100 m. Vouchers: Napier ER 988, Bally PRO 13415 & 14139, Gilbert MG 5816, Tweedie 86 (EA). Vulnerable.
- *Euphorbia tirucalli* L. Habit: Shrub/Tree. Habitat: Grassland, thin woodland, homesteads, 998–1219 m. Vouchers: Watuma BM W0318 (EA, HIB), Bally PRO & Carter S 14136, Napier ER 1147, Medley KEM p.r. (EA).
- Euphorbia transvaalensis Schltr.— Habit: Herb. Habitat: Dense bushland, light woodland near stream beds, 450–500 m.Voucher: Greenway PJ & Kanuri K 12678 (EA).
- *Euphorbia umbellata* (Pax) Bruyns Habit: Tree. Habitat: Rocky slopes with dry open woodland, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 340 (EA).
- *Euphorbia usambarica* Pax subsp. *usambarica* Habit: Shrub. Habitat: Understorey in open montane forest, 950–1850 m. Vouchers: Morawetz JJ & Wabuyele E 401, Gillett JB, Burtt BL & Osborn RM 17105, Faden RB et al. NMK Exped. 1000, Beentje HJ et al. NMK Exped. 1072, Bally PRO 8776 & 13599 (EA).
- \*Jatropha curcas L. Habit: Shrub/Tree. Habitat: Hedge plant escaping into the wild. Voucher: Otieno GO 77A (EA).
- Jatropha spicata Pax Habit: Subshrub. Habitat: Deciduous bushland and thicket, shallow soil on rocky hillsides, 487–1000 m. Vouchers: Luke WRQ & Luke PA 4175, Faden RB & Faden AJ 74/434, Medley KE 479, 508 & 805, Hildebrandt JM 2428, Napier ER 920, Bally PRO 8674, Verdcourt B & Polhill RM 2710, Greenway PJ & Kanuri K 12657 & 12719, Verdcourt B 5320, Mrs. Robertson SA 7503 (EA).
- NE Jatropha velutina Pax & K.Hoffm. Habit: Subshrub. Habitat: Acacia-Commi-phora bushland and mixed thicket, 550–700 m. Vouchers: Luke WRQ & Luke PA 4171, Medley KE 504 (EA).
- Macaranga capensis (Baill.) Sim Habit: Tree. Habitat: Evergreen forest, 1200–1850 m. Vouchers: Raler I 0015, Faden RB et al. 70/515, NMK Taita Hills Exped. 1183 (EA).
- NE Macaranga conglomerata Brenan Habit: Tree. Habitat: Upland evergreen forest, 1350–1875 m. Vouchers: Watuma BM W0062 (EA, HIB), Wakanene KM &

- Mwangangi OM 213 & 623, Drummond RB & Hemsley JH 4372, Faden RB et al. NMK Exped. 202 & 462, Beentje HJ et al. NMK Exped. 1097, Faden RB et al. 71/18, 247, 72/200 & 77/318, Raler 0147 (EA). Vulnerable.
- *Macaranga kilimandscharica* Pax Habit: Tree. Habitat: Evergreen forest, secondary forest, 1000–1800 m. Vouchers: Mungai GM et al. EW3557, Bally PRO 13601 (EA).
- *Mildbraedia carpinifolia* (Pax) Hutch var. *carpinifolia* Habit: Shrub. Habitat: Forest undergrowth and edges, riverine, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 617 (EA). Vulnerable.
- Neoboutonia macrocalyx Pax Habit: Tree. Habitat: Forest edges, openings and regrowth, 1700–2000 m. Vouchers: Raler I 0136, Faden RB et al. NMK Exped. 346 & 500, Gillett JB 17244, Heller E s.n. (EA).
- \**Ricinus communis* L. Habit: Herb. Habitat: Evergreen bushland, roadsides, near homesteads, 1040–1778 m. Vouchers: Watuma BM W0286 (EA, HIB), Mwachala G et al. EW1219 & 1360 (EA).
- *Spirostachys africana* **Sond.** Habit: Shrub/Tree. Habitat: Deciduous woodland and bushland, 650–1000 m. Voucher: Medley KE 914 (EA).
- Suregada zanzibariensis Baill. Habit: Tree. Habitat: Forest, woodland and bushland, 650–1150 m. Vouchers: Mungai GM et al. EW1654, Medley KE 536, 538, 542, 598, 676 & 712, Faden RB et al. 69/447 (EA).
- *Tragia brevipes* Pax Habit: Climber. Habitat: Forest edges and thickets, riverine, disturbed sites, 1048–1250 m. Vouchers: Watuma BM W0161 (EA, HIB), Mwachala G et al. EW2576 (EA).
- *Tragia impedita* Prain Habit: Subshrub. Habitat: Roadsides, rocky or disturbed deciduous bushland and wooded grassland, ca. 600 m. Voucher: Faden RB & Faden AJ 74/453 (EA).

## F82. FABACEAE

55 Genera, 125 species

- *Abrus precatorius* L. subsp. *africanus* Verdc. Habit: Liana. Habitat: Woodland, bushland, grassland with scattered thicket, 650–1000 m. Vouchers: SAJIT–004528 (EA, HIB), Kabuye CHS et al. NMK Exped. 614, Medley KE 584 (EA).
- Abrus fruticulosus Wall. ex Wight & Arn. Habit: Shrub. Habitat: Acacia woodland, bushland on rocky slopes, forest edge, 700–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 728, Mwachala G et al. EW780, Polhill RM & Kibuwa SP 957, Bally J 12705 (EA).
- \*Acacia mearnsii De Wild. Habit: Tree. Habitat: Forest and forest remnant margins, 1830–2170 m. Vouchers: Watuma BM W0094 (EA, HIB), Faden RB et al. NMK Exped. 90 (EA).
- \*Acacia melanoxylon R.Br. Habit: Tree. Habitat: Remnant forest patches, 2000–2170 m. Voucher: Faden RB et al. NMK Exped. 91 (EA).
- *Adenocarpus mannii* (Hook.f.) Hook.f. Habit: Shrub. Habitat: Margins of upland rainforest, ca. 1814 m. Voucher: SAJIT–004549 (EA, HIB).

- Aeschynomene schimperi Hochst. ex A.Rich. Habit: Subshrub. Habitat: Riverine vegetation, 800–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 698, Mwachala G et al. EW1683 (EA).
- Afroamphica africana (Hook.f.) H.Ohashi & K.Ohashi Habit: Climber. Habitat: Evergreen forest in open areas and path sides, 1100–1980 m. Vouchers: SA-JIT–004571 & 006363 (EA, HIB), Mungai GM et al. EW1307, Drummond RB & Hemsley JH 4288 (EA).
- Albizia adianthifolia (Schumach.) W.Wight var. intermedia (De Wild. & T.Durand) Villiers Habit: Tree. Habitat: Lowland rainforest, deciduous woodland, ca. 900 m. Voucher: Mwachala G et al. EW1689 (EA).
- *Albizia amara* (Roxb.) Boivin Habit: Tree. Habitat: Edge of deciduous bushland near stream, bushed grassland, ca. 1059 1070 m. Vouchers: Watuma BM W0150 (EA, HIB), Mwachala G et al. EW1367 (EA).
- *Albizia anthelmintica* (A.Rich.) Brongn. Habit: Tree. Habitat: Deciduous bushland, 550–650 m. Voucher: Medley KE 943 (EA).
- *Albizia gummifera* (J.F.Gmel.) C.A.Sm. Habit: Tree. Habitat: Evergreen forest, 1220–1875 m. Vouchers: Watuma BM W0291 (EA, HIB), Faden RB et al. NMK Exped. 328, Joanna 8945 & 8961, Faden RB et al. 71/1003, Medley KE 919 (EA).
- *Albizia harveyi* E.Fourn. Habit: Tree. Habitat: Bushland, 500–650 m. Vouchers: Medley KE 1004, Medley KE s.n. (EA).
- *Albizia petersiana* (Bolle) Oliv. Habit: Tree. Habitat: Ground water forests, bushland, ravines in deciduous woodland. Voucher: Joanna B 8796 (EA).
- *Albizia zimmermannii* Harms Habit: Tree. Habitat: Secondary bush near lowland rainforest, 650–1000 m. Vouchers: Medley 689 & 716, Joanna B 8905 (EA).
- Antopetitia abyssinica A.Rich. Habit: Herb. Habitat: Forest clearings, roadsides, weed in cultivations, 1817–2170 m. Vouchers: SAJIT–004550 & 006401 (EA, HIB), Faden RB et al. NMK Exped. 110 (EA).
- Bauhinia taitensis Taub. Habit: Shrub. Habitat: Deciduous bushland, dry scrub with trees, 457–640 m. Vouchers: Mwangangi 7, Faden RB & Faden AJ 74/444, Greenway PJ & Kanuri K 12728, Bally PRO 8852, Hildebrandt JM 2603, Ossent JR 148 (EA).
- Bauhinia tomentosa L. Habit: Shrub. Habitat: Woodland, deciduous bushland and thicket along river, 800–1061 m. Vouchers: SAJIT–005358, Watuma BM W0163 (EA, HIB), Faden RB & Faden AJ 74/468, Medley KE 486 & 818, Drummond RB & Hemsley JH 4407, Sacleux C 2366 (EA).
- \* *Biancaea decapetala* (Roth) O.Deg. Habit: Shrub. Habitat: Mist forest margin next to cultivated lands, pathside, ca. 1851 m. Voucher: Watuma BM W0091 (EA, HIB).
- \*Calliandra houstoniana (Mill.) Standl. Habit: Shrub. Habitat: Margins of relict montane forest, cultivated lands, ca. 1348 m. Voucher: Watuma BM W0228 (EA, HIB).
- Cassia abbreviata Oliv. Habit: Tree. Habitat: Deciduous bushland and dry scrub with trees, 500–1000 m. Vouchers: Faden RB et al. 69/417, Medley KE 1020,

- Friis I & Hansen OJ 2663, Vesey-FitzGerald LDEF 41, Hucks M 431, Bally PRO 13283, Tim C & Oakley s.n. (EA).
- *Chamaecrista kirkii* (Oliv.) Standl. Habit: Herb. Habitat: Forest edges and clearings, grassland, ca. 1500 m. Voucher: SAJIT–004116 (EA, HIB).
- Chamaecrista mimosoides (L.) Greene Habit: Herb. Habitat: Forest clearings and margins, wooded grassland, cultivated and waste grounds, ca. 1220 m. Voucher: Napier ER 1073 in CM 2242 (EA).
- *Chamaecrista zambesica* (Oliv.) Lock Habit: Subshrub. Habitat: Wooded grassland, grassland, 914–1600 m. Vouchers: Beentje HJ et al. NMK Exped. 1156, Hildebrandt JM 2464 (EA).
- Craibia brevicaudata (Vatke) Dunn Habit: Tree. Habitat: Evergreen forest, semi-deciduous woodland, dry forest on rocky slopes, riverine, 487–1640 m. Vouchers: Luke WRQ & Luke PA 5526, Faden RB, Evans A & Msafiri F 70/958, Verdcourt B & Polhill RM 2715, Greenway PJ & Kanuri K 13027, Medley KE 556, 581, 719 & 995 (EA). Near Threatened.
- Craibia zimmermannii (Harms) Dunn Habit: Tree. Habitat: Forest, 1425–1875 m. Vouchers: Watuma BM W0270 (EA, HIB), Beentje HJ et al. NMK Exped. 877, Faden RB et al. NMK Exped. 384 & 537, Faden RB et al. 70/529, 748 & 71/970, Raler I 0013 (EA).
- Crotalaria axillaris Aiton Habit: Subshrub. Habitat: Forest margins, deciduous woodland and bushland, abandoned cultivations, 1250–1875 m. Vouchers: SA-JIT–005342 (EA, HIB), Mwachala G et al. EW3526, Wakanene KM & Mwangangi OM 347 & 436, Faden RB et al. NMK Exped. 188 (EA).
- Crotalaria barkae Schweinf. subsp. barkae Habit: Herb. Habitat: Deciduous bushland and grassland, ca. 900 m. Voucher: Mwachala G et al. EW2810 (EA).
- Crotalaria barkae Schweinf. subsp. cordisepala Polhill Habit: Herb. Habitat: Roadside in bracken zone, sandy places in grassland and stream sides, 900–1360 m. Vouchers: Kabuye CHS 82/146, Faden RB & Faden AJ 72/257, Flauret A 13 (EA).
- Crotalaria barkae Schweinf. subsp. teitensis (Sacleux) Polhill Habit: Herb. Habitat: Deciduous woodland and bushland, grassland, 530–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 653, Muasya S 45, Sacleux C 2406, Soest LU EA16062 (EA).
- Crotalaria distantiflora Baker f. Habit: Herb. Habitat: Upland rainforest clearings and margins, 1371–1780 m. Vouchers: Wakanene KM & Mwangangi OM 613a & 740, Napier ER 1100 (EA).
- Crotalaria goodiiformis Vatke Habit: Shrub. Habitat: Margins and clearings of upland rainforest, dry evergreen forest, deciduous woodland, 720–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 735, Gillett JB 18744, Hildebrandt JM 2548 (EA).
- Crotalaria greenwayi Baker f. Habit: Herb. Habitat: Grassland, deciduous bushland, persisting on cultivated ground, 620–853 m. Vouchers: Greenway PJ & Kanuri K 10428, Gillett JB & Burtt BL 17175 (EA).

- *Crotalaria incana* L. subsp. *incana* Habit: Subshrub. Habitat: 950–1580 m. Vouchers: SAJIT–004109 (EA, HIB), Mwachala G et al. EW2806 & 3066A (EA).
- Crotalaria laburnifolia L. Habit: Herb. Habitat: Deciduous woodland, bushland, secondary scrub, grassland, roadsides, 700–1773 m. Vouchers: SAJIT–005369, Watuma BM W0263 (EA, HIB), Kirika P, Rory M, Mbale M NMK 594, Luke WRQ et al. 4230, Gillett JB 17219 (EA).
- NE Crotalaria lukwangulensis Harms Habit: Shrub/Liana. Habitat: Rainforest margins and clearings, 1425–2195 m. Vouchers: Wakanene KM & Mwangangi OM 375, Mwasaru G 24, Faden RB et al. NMK Exped. 129 & 950, Faden RB et al. 71/1005, Lavranos JJ & Newton 17642, Verdcourt B & Polhill RM 2716, Drummond RB & Hemsley JH 4358, Gillett JB, Burtt BL & Osborn RM 17088 (EA).
- Crotalaria natalitia Meisn. var. rutshuruensis De Wild. Habit: Subshrub. Habitat: Margins of upland rainforest and grassland, deciduous bushland and woodland, 1350–2000 m. Vouchers: Mwachala G et al. EW2665, Beentje HJ et al. NMK Exped. 883 & 927, Drummond RB & Hemsley JH 4300 (EA).
- *Crotalaria polysperma* Kotschy Habit: Herb. Habitat: Deciduous woodland and bushland, *Acacia-Commiphora* scrub, 600–701 m. Vouchers: Polhill RM & Kibuwa SP 967, Mrs. Robertson SA 6542 (EA).
- Crotalaria scassellatii Chiov. Habit: Shrub. Habitat: Forest margins, deciduous bushland and grassland, rocky outcrops, 610–950 m. Vouchers: Kirika P, Rory M & Mbale M NMK 593, Polhill RM & Kibuwa SP 936 (EA).
- Crotalaria ukambensis Vatke Habit: Herb. Habitat: Deciduous bushland and scattered tree grassland, 609–1100 m. Vouchers: Cheseny CMC 32/72, Polhill RM & Kibuwa SP 932, Gillett JB 17232, Napier ER 930, Rauh W KE71 (EA). Endangered.
- Crotalaria vallicola Baker f. Habit: Herb. Habitat: Grassland and secondary bushland, rock outcrops, cleared and cultivated lands, 1371–1480 m. Vouchers: Napier ER 1129 (EA), Hemp A 4566 (EA).
- NE Cynometra sp. A of FTEA Habit: Tree. Habitat: Moist forest, 1425–1850 m. Vouchers: Faden RB et al. 70/564, Faden RB et al. NMK Exped. 783, Raler I 0014 (EA).
- Dalbergia lactea Vatke Habit: Shrub. Habitat: Upland forest, forest margins and evergreen bushland, 1425–1851 m. Vouchers: SAJIT–006341, Watuma BM W0087 (EA, HIB), Beentje HJ et al. NMK Exped. 425, Hildebrandt JM 2439, Gardner HM 2945 (EA).
- Dalbergia melanoxylon Guill. & Perr. Habit: Shrub/Tree. Habitat: Deciduous woodland, rocky slopes and valleys, 650–1400 m. Vouchers: Kabuye CHS 82/95, Kabuye CHS et al. NMK Exped. 680, Mwachala G et al. EW104, 964, 1237, 1326, Wakanene KM & Mwangangi OM 457, Medley KE 865 & 916 (EA). Near Threatened.
- *Dalbergia microphylla* Chiov. Habit: Shrub/Tree. Habitat: Deciduous woodland, 710–960 m. Vouchers: Medley KE 559 & 860, Gillett JB 19564, Joanna B 8834 (EA).

- *Dalbergia vacciniifolia* Vatke Habit: Shrub/Tree. Habitat: Deciduous bushland and woodland, 600–850 m. Voucher: Medley KE 858b (EA).
- *Delonix elata* (L.) Gamble Habit: Tree. Habitat: Deciduous thickets and bushland, 550–650 m. Vouchers: Medley KE 415, Napier ER Bax TNP/E/36 (EA).
- *Dichrostachys cinerea* (L.) Wight & Arn. subsp. *cinerea* Habit: Shrub. Habitat: Deciduous bushland and woodland, grassy slopes near forest, 944–1150 m. Vouchers: Watuma BM W0004 (EA, HIB), Mungai GM et al. EW1392 & 1668 (EA).
- *Dichrostachys cinerea* (L.) Wight & Arn. subsp. *forbesii* (Benth.) Brenan & Brummitt Habit: Shrub. Habitat: Evergreen bushland, clump grassland, 550–1250 m. Vouchers: Wakanene KM & Mwangangi OM 439, Medley KE 464 (EA).
- *Dolichos sericeus* E.Mey. subsp. *glabrescens* Verdc. Habit: Climber. Habitat: Bushland and dry evergreen forest, 1219–1400 m. Vouchers: Mwachala G et al. EW3108A, Napier ER 1085 & 1088, Animal Husbandry Division EA 14194 (EA).
- *Entada leptostachya* Harms Habit: Liana. Habitat: Deciduous bushland, dry scrub with trees, 550–884 m. Vouchers: Watuma BM W0177 (EA, HIB), Medley KE 519, Faden RB & Faden AJ 74/267, Braun K 1540 (EA).
- *Eriosema montanum* Baker f. Habit: Herb. Habitat: Forest edges, bushland, grassland, 914–2000 m. Vouchers: Luke WRQ et al. 4221, Beentje HJ et al. NMK Exped. 907, Hildebrandt JM 2445 (EA).
- *Eriosema psoraleoides* (Lam.) G.Don Habit: Shrub. Habitat: Grassland with scattered *Acacia-Commiphora*, bushland, cultivation margins, 1050–1259 m. Vouchers: Kirika P et al. 01/2006/09, Mungai GM et al. EW1754, Bally PRO 8576, Napier ER 1075 (EA).
- *Erythrina abyssinica* Lam. ex DC. Habit: Tree. Habitat: Scattered tree grassland, open woodland, 600–1563 m. Vouchers: Watuma BM W0280 (EA, HIB), Drummond RB & Hemsley JH 4403, Medley KEM p.r. (EA).
- *Erythrina burttii* Baker f. Habit: Tree. Habitat: *Acacia-Commiphora-Combretum* woodland, derived grassland, ca. 960 m. Voucher: Gillett JB 19561 (EA).
- *Erythrina melanacantha* **Taub. ex Harms** Habit: Tree. Habitat: *Acacia-Commiphora* bushland, ca. 420 m. Voucher: Faden RB & Faden AJ 74/286 (EA).
- *Faidherbia albida* (**Delile**) **A.Chev.** Habit: Tree. Habitat: Riverine, ground water forest and woodland. Voucher: Grenfell (EA).
- *Gelrebia trothaei* (Harms) Gagnon & G.P.Lewis— Habit: Shrub. Habitat: Deciduous bushland, dry scrub with trees, ca. 487 m. Voucher: Bally PRO 8681 (EA).
- Grona barbata (L.) H.Ohashi & K.Ohashi Habit: Herb. Habitat: Deciduous woodland and grassland, 1425–1850 m. Voucher: Faden RB et al. NMK Exped. 445 (EA).
- Hylodesmum repandum (Vahl) H.Ohashi & R.R.Mill Habit: Herb. Habitat: Mist forest in clearings and margins, 920–2170 m. Vouchers: Watuma BM W0038 (EA, HIB), Mwachala G et al. EW1691, 2594 & 3064A, Napier ER 1112 (EA).
- Indigastrum costatum (Guill. & Perr.) Schrire subsp. goniodes (Hochst. ex Baker) Schrire – Habit: Subshrub. Habitat: Terminalia-Sansevieria bushland, grassland, ca. 600 m. Voucher: Faden RB & Faden AJ 74/244 (EA).

- *Indigofera arrecta* Hochst. ex A.Rich. Habit: Subshrub. Habitat: Forest margins, secondary growth, deciduous and upland evergreen bushland, 2000–2170 m. Voucher: Faden RB et al. NMK Exped. 123 (EA).
- *Indigofera atriceps* Hook.f. Habit: Herb. Habitat: Upland grassland, forest margins, along rivers, 900–2000 m. Vouchers: Mwachala G et al. EW1694, Drummond RB & Hemsley JH 4298 (EA).
- *Indigofera kaessneri* Baker f. Habit: Subshrub. Habitat: Grassland, bushland and forest margins, 1250–2170 m. Vouchers: Faden RB et al. NMK Exped. 124, Napier ER 1087 (EA).
- *Indigofera lupatana* Baker f. Habit: Shrub. Habitat: Deciduous bushland and thicket on rocky slopes, 650–1000 m. Vouchers: Watuma BM W0170 (EA, HIB), Kabuye CHS et al. NMK Exped. 642, Mrs. Robertson SA 3587, Medley KE 453, 756 & 810 (EA).
- *Indigofera sisalis* J.B.Gillett Habit: Herb. Habitat: Deciduous woodland and bushland, sisal plantations, cultivated lands, 600–762 m. Vouchers: Sampson HC 97 (EA), Hucks M 686 (EA).
- *Indigofera spicata* Forssk. Habit: Herb. Habitat: Deciduous bushland, cultivated areas and waste places, ca. 550 m. Voucher: Medley KE 517 (EA).
- *Indigofera subulata* Vahl ex Poir. var. *scabra* (Roth) Meikle Habit: Subshrub. Habitat: Bushland, secondary growth, 550–650 m. Vouchers: Medley KEM s.n., Grenfell (EA).
- *Indigofera swaziensis* Bolus var. *perplexa* (N.E.Br.) J.B.Gillett Habit: Shrub. Habitat: Upland evergreen bushland and forest margins, 900–1200 m. Voucher: Gillett JB 18751 (EA).
- NE *Indigofera tanganyikensis* Baker f. Habit: Subshrub. Habitat: *Acacia-Commiphora* open bushland, 600–1000 m. Vouchers: Faden RB & Faden AJ 74/451, Uhlig C 33 (EA).
- \*Indigofera tinctoria L. Habit: Shrub. Habitat: Bush margins, cultivations and secondary growth, ca. 1130 m. Voucher: Medley KE 649 (EA).
- Kotschya aeschynomenoides (Welw. ex Baker) Dewit & P.A.Duvign. Habit: Shrub. Habitat: Upland forest, evergreen bushland, rocky outcrops on hills, 1371–1800 m. Vouchers: Kabuye CHS et al. 82/55, Dale in FD 3782, Bally PRO 13639, Drummond RB & Hemsley JH 4328 (EA).
- *Kotschya africana* Endl. var. *bequaertii* (De Wild.) Verdc. Habit: Shrub. Habitat: Forest edges, fringing forest, thicket, scrub, 1500–1550 m. Voucher: Beentje HJ et al. NMK Exped. 885 (EA).
- \*Leucaena leucocephala (Lam.) de Wit Habit: Tree. Habitat: Forest edges, roadside, settlements, ca. 1567 m. Voucher: Watuma W0208 (EA, HIB).
- *Macrotyloma axillare* (E.Mey.) Verdc. var. *axillare* Habit: Climber. Habitat: Grassland with scattered trees, thicket, 1000–1550 m. Vouchers: Mwachala G et al EW3056A (EA), Mungai G et al EW1339 (EA).

- *Macrotyloma axillare* (E.Mey.) Verdc. var. *glabrum* (E.Mey.) Verdc. Habit: Climber. Habitat: Grassland, bushland, open forest, ca. 2050 m. Voucher: Gillett JB 17250 (EA).
- *Macrotyloma maranguense* (Taub.) Verdc. Habit: Climber. Habitat: Grassland with scattered trees, 1220–1371 m. Vouchers: Napier ER 1090, Bally PRO 12736 (EA).
- *Macrotyloma uniflorum* (Lam.) Verdc. var. *uniflorum* Habit: Climber. Habitat: Old cultivations, ca. 1240 m. Voucher: Mungai GM et al. EW3194 (EA).
- *Macrotyloma uniflorum* (Lam.) Verdc. var. *stenocarpum* (Brenan) Verdc. Habit: Climber. Habitat: *Acacia* bushland and thicket, old cultivations, ca. 450–610 m. Vouchers: Napier ER 1011, Gillett JB 21009 (EA).
- NE Millettia oblata Dunn subsp. burttii J.B.Gillett Habit: Tree. Habitat: Deciduous thicket, ca. 890 m. Vouchers: Mwachala G et al. EW1680, Lubai lK HB17 (EA).
- NE Millettia oblata Dunn subsp. teitensis J.B.Gillett Habit: Tree. Habitat: Upland evergreen forest and scrub, 1225–1875 m. Vouchers: SAJIT–003296 & 006386, Watuma BM W0072 (EA, HIB), Wakanene KM & Mwangangi OM 546, Maina 17, Bytebier B 1430, Faden RB et al. NMK Exped. 39, 276, 420 & 485, Beentje HJ et al. NMK Exped. 1184, Drummond RB & Hemsley JH 4390, Gillett JB, Burtt BL & Osborn RM 17118, Dale IR 3781, Bally PRO 8587, Raler I 0022, Gardner HM 1201, Heller E s.n. (EA). Vulnerable.
- *Millettia usaramensis* Taub.— Habit: Tree. Habitat: Wooded grassland, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 630 (EA).
- *Mucuna gigantea* (Willd.) DC. Habit: Liana. Habitat: Bushland, forest edges along river, ca. 1056 m. Voucher: Watuma BM W0159 (EA, HIB).
- *Mundulea sericea* (Willd.) A.Chev. Habit: Shrub. Habitat: Deciduous woodland and bushland on rocky hills, 650–1000 m. Vouchers: Medley KEM 468, 745 & 858a (EA).
- Neonotonia wightii (Wight & Arn.) J.A.Lackey var. mearnsii (De Wild.) J.A.Lackey Habit: Climber. Habitat: Forest, grassland with scattered trees and secondary grassland, ca. 900 m. Voucher: Mwachala G et al. EW2809 (EA).
- Newtonia buchananii (Baker f.) G.C.C.Gilbert & Boutique Habit: Tree. Habitat: Upland rainforest near steams, ground water and riverine forests, 1200–1640 m. Vouchers: Beentje HJ et al. NMK Exped. 1078, Raler I 0005, Medley KE 940 (EA).
- *Newtonia hildebrandtii* (Vatke) Torre Habit: Tree. Habitat: Riverine forests, dry areas with high water table, 600–800 m. Vouchers: Drummond RB & Hemsley JH 4275, Hildebrandt JM 2492, Medley KE 869 & 959, Bally PRO 8777 (EA).
- Ormocarpum kirkii S.Moore Habit: Tree. Habitat: Acacia-Commiphora bushland, grassland, 750–980 m. Vouchers: Faden RB & Faden AJ 74/506, Medley KE 639 (EA).

- *Philenoptera eriocalyx* (Harms) Schrire Habit: Shrub/Tree. Habitat: Dry evergreen forest, deciduous bushland, 550–650 m. Voucher: Medley KE 781 (EA).
- *Platycelyphium voense* (Engl.) Wild Habit: Tree. Habitat: *Acacia-Commiphora* deciduous bushland, 500–670 m. Vouchers: Medley KE 969, Engler A 1958, Bally PRO 8851 (EA).
- Pleurolobus salicifolius (Poir.) H.Ohashi & K.Ohashi Habit: Shrub. Habitat: Wet areas in grassland, near rivers, ca. 1000 m. Voucher: Mungai GM et al. EW2819 (EA).
- *Pseudarthria hookeri* Wight & Arn. var. *hookeri* Habit: Subshrub. Habitat: Grassland with scattered trees and thicket, old cultivations, 1030–1220 m. Vouchers: Mwachala G et al. EW795, Napier ER 1098 (EA).
- *Pseudarthria hookeri* Wight & Arn. var. A Habit: Subshrub. Habitat: Deciduous woodland and bushland, ca. 1000 m. Voucher: Mwachala G et al. EW1569 (EA).
- *Rhynchosia hirta* (Andrews) Meikle & Verdc. Habit: Climber. Habitat: Forest edges, hillside bushland, cultivation margins, ca. 1000 m. Voucher: Mungai GM et al EW3558 (EA).
- *Rhynchosia nyasica* Baker Habit: Herb. Habitat: Grassland with scattered trees, woodland, ca. 1200 m. Voucher: Napier ER 1094 (EA).
- Rhynchosia pulchra (Vatke) Harms Habit: Shrub. Habitat: Bushland, open woodland, 600–1100 m. Vouchers: Luke WRQ & Luke PA 5507, Greenway PJ & Kanuri K 12585, Hildebrandt JM 2528 (EA).
- *Rhynchosia usambarensis* Taub. var. *usambarensis* Habit: Herb. Habitat: Forest edges, bushland, riverine thicket, 1500–1750 m. Vouchers: SAJIT–004112 (EA, HIB), Mwachala G et al. EW3054 (EA).
- Senegalia brevispica (Harms) Seigler & Ebinger Habit: Tree. Habitat: Bushland, thickets and scrubs, 850–1200 m. Vouchers: Kabuye CHS et al. NMK Exped. 732, Mwachala G et al. EW222 & 1201, Wakanene KM & Mwangangi OM 481, Faden RB & Faden AJ 74/481, Medley KE 423 & 458, Joanna B 8867 (EA).
- Senegalia mellifera (Vahl) Seigler & Ebinger subsp. mellifera Habit: Tree. Habitat: Deciduous bushland, dry scrub with trees, 457–700 m. Vouchers: Faden RB & Faden AJ 74/273, Hucks M 871, King AL 14/82 & 13/83 (EA).
- Senegalia polyacantha (Willd.) Seigler & Ebinger subsp. campylacantha (Hochstex. A.Rich.) Kyal. & Boatwr. Habit: Tree. Habitat: Grassland and riverbank, sandy soil, 600–800 m. Voucher: Jeffery GW K808 (EA).
- Senegalia senegal (L.) Britton Habit: Shrub. Habitat: Deciduous bushland, dry scrub with trees, 485–950 m. Vouchers: Faden RB & Faden AJ 74/269, Medley KE 425, Muasya AM & Safary 64 & 65, Hildebrandt JM 2486, Bally PRO 17124, Leippert H 5643, Friis I & Hansen OJ 2661 (EA).
- \*Senna bicapsularis (L.) Roxb. Habit: Shrub. Habitat: Bushland, grassland, old cultivations, 600–1250 m. Vouchers: Mungai GM et al. EW1403, Bally PRO 8744 (EA).

- Senna didymobotrya (Fresen.) H.S.Irwin & Barneby Habit: Shrub. Habitat: Forest margins, 1700–1875 m. Vouchers: Watuma BM W0067 (EA, HIB), Wakanene KM & Mwangangi OM 718, Faden RB et al. NMK Exped. 475 (EA).
- **Sennia longiracemosa** (Vatke) Lock Habit: Shrub. Habitat: Dry scrub with trees, deciduous bushland, 600–750 m. Vouchers: Hildebrandt JM 2506, Lubai IK HB 6 (EA).
- \*Senna occidentalis (L.) Link Habit: Subshrub. Habitat: Riverine vegetation, weed of cultivation, roadside and waste ground, 600–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 731, Napier ER 971 (EA).
- Senna singueana (Delile) Lock Habit: Shrub/Tree. Habitat: Woodland, wooded grassland, bushland, 1200–1371 m. Vouchers: Wakanene KM & Mwangangi OM 494, Napier ER 1123 (EA).
- Sesbania sesban (L.) Merr. Habit: Tree. Habitat: Evergreen bushland along streams, ca. 1206 m. Voucher: Watuma BM W0012 (EA, HIB).
- Spathionema kilimandscharicum Taub. Habit: Climber. Habitat: Mixed deciduous bushland, 450–660 m. Vouchers: Faden RB & Faden AJ 74/277, Napier ER 900, Kuchar P et al. 5697, Ossent J 98, Gillett JB 16874 & 21003 (EA).
- Stylosanthes fruticosa (Retz.) Alston Habit: Subshrub. Habitat: Bushland, grassland with scattered Acacia, old cultivations, 700–1100 m. Vouchers: SAJIT–005382 (EA, HIB), Mwachala G et al. EW94, Jongh EG 129 (EA).
- *Tamarindus indica* L. Habit: Tree. Habitat: Remnant in cleared farmland, open woodland and bushland, ca. 859 m. Voucher: Watuma BM W0197 (EA, HIB).
- *Tephrosia aequilata* Baker Habit: Shrub. Habitat: Upland grassland, heathland and scrubland, 1676–2000 m. Vouchers: Faden RB et al. NMK Exped. 257, Dale IR 3779, Gillett JB, Burtt BL & Osborn RM 17139 (EA).
- *Tephrosia villosa* (L.) Pers. subsp. *ehrenbergiana* (Schweinf.) Brummitt Habit: Herb. Habitat: Open places in *Acacia-Commiphora* bushland, 700–865 m. Vouchers: Watuma BM W0172 (EA, HIB), Jongh EG 130 (EA).
- *Tephrosia vogelii* Hook.f. Habit: Subshrub. Habitat: Forest margin, waste grounds, old cultivations, 1350–1550 m. Voucher: Kabuye CHS 82/188 (EA).
- *Tylosema fassoglense* (Kotschy ex Schweinf.) Torre & Hillc. Habit. Climber. Habitat: Wooded grassland, deciduous bushland, 600–865 m. Vouchers: Watuma BM W0198 (EA, HIB), Polhill RM & Kibuwa SP 960, Bally PRO 8591 (EA).
- *Vachellia ancistroclada* (Brenan) Kyal. & Boatwr. Habit: Tree. Habitat: Dry scrub with trees, 550–1000 m. Vouchers: Medley KE 729 & 909 (EA).
- Vachellia bussei (Harms ex Y.Sjöstedt) Kyal. & Boatwr. Habit: Shrub/Tree. Habitat: Deciduous bushland and dry scrub, 460–650 m. Vouchers: Dale IR 3884, King A 16/83, Medley KEM p.r. (EA).
- *Vachellia etbaica* (Schweinf.) Kyal. & Boatwr. subsp. *platycarpa* (Brenan) Kyal. & Boatwr. Habit: Tree. Habitat: Deciduous bushland, dry scrub with trees, 550–1000 m. Vouchers: Faden RB & Faden AJ 74/268, Medley KE 845 (EA).

- Vachellia gerrardii (Benth.) P.J.H.Hurter var. gerrardii Habit: Tree. Habitat: Woodland and wooded grassland, ca. 914 m. Voucher: Watuma BM W0324 (EA, HIB).
- Vachellia gerrardii (Benth.) P.J.H.Hurter var. calvescens (Brenan) Kyal. & Boatwr.
   Habit: Shrub/Tree. Habitat: Riverine forest, wooded grassland. Voucher: Bally PRO 12013 (EA).
- *Vachellia hockii* (**De Wild.**) **Seigler & Ebinger** Habit: Tree. Habitat: Secondary forest, *Acacia-Commiphora* woodland and bushland, 950–1371 m. Vouchers: Kabuye CHS 82/6, Mwachala G et al. EW776 & 2804, Mungai GM et al. EW1978 (EA).
- *Vachellia horrida* (L.) Kyal. & Boatwr. subsp. *benadirensis* (Harms ex Y.Sjöstedt) Kyal. & Boatwr. Habit: Shrub/Tree. Habitat: *Acacia-Commiphora* bushland, open grassland, 609–1370 m. Vouchers: Kabuye CHS 82/122, Dale IR 3891 (EA).
- Vachellia nilotica (L.) P.J.H.Hurter & Mabb. subsp. subalata (Vatke) Kyal. & Boatwr. Habit: Tree. Habitat: Woodland, open and clump bushland, 500–700 m. Vouchers: Kabuye CHS et al. NMK Exped. 639, Chemusto 9, Faden RB & Faden AJ 74/272, Medley KE 433, Hildebrandt JM 2591, Greenway PJ & Kanuri K 12958 (EA).
- Vachellia reficiens (Wawra & Peyr.) Kyal. & Boatwr. subsp. misera (Vatke) Kyal. & Boatwr. Habit: Shrub. Habitat: Dry Acacia bushland, 500–650 m. Voucher: Medley KE 758 (EA).
- Vachellia robusta (Burch.) Kyal. & Boatwr. subsp. usambarensis (Taub.) Kyal. & Boatwr. Habit: Tree. Habitat: Riverine forest, woodland and bushland, 640–1000 m. Vouchers: Medley KE 972, Hucks M 967, Fagg CW 594 (EA).
- Vachellia stuhlmannii (Taub.) Kyal. & Boatwr. Habit: Shrub. Habitat: Wooded grassland, deciduous bushlands, ca. 500 m. Voucher: Medley KE 733 (EA).
- Vachellia tortilis (Forssk.) Galasso & Banfi subsp. spirocarpa (Hochst. ex. A.Rich.) Kyal. & Boatwr. Habit: Tree. Habitat: Deciduous woodland and bushland on red sandy soil, 500–700 m. Vouchers: Faden RB & Faden AJ 74/267, Medley KE 428 (EA).
- *Vachellia zanzibarica* (S.Moore) Kyal. & Boatwr. Habit: Shrub/Tree. Habitat: In wooded grassland, 457–650 m. Vouchers: Kakande M 36, King AL 12/83, Medley KE p.r. (EA).
- Vigna kirkii (Baker) J.B.Gillett Habit: Climber. Habitat: Sandy soils by rivers in semi-desert bushland, old cultivations, ca. 579 m. Voucher: Napier ER 994 (EA).
- Vigna membranacea A.Rich. subsp. caesia (Chiov.) Verdc. Habit: Climber. Habitat: Acacia-Commiphora bushland, ca. 600 m. Vouchers: Verdcourt B 5265, Friis F 97, Ossent JR 159, Leuthold W 116 (EA).
- Vigna parkeri Baker subsp. maranguensis (Taub.) Verdc. Habit: Climber. Habitat: Forest, thicket, weed of cultivation, homesteads, 914–2000 m. Vouchers: SA-JIT–004524, Kabuye CHS 82/101 & 115, Faden RB et al. NMK Exped. 32, Napier ER 1110, Bally PRO 8778, Gillett JB & Burtt BL 17070, Agriculture Dept. B867 (EA).
- Vigna unguiculata (L.) Walp. subsp. dekindtiana (Harms) Verdc. Habit: Herb. Habitat: Forest edges, grassland, 1100–1550 m. Vouchers: Wakanene KM & Mwangangi OM 329, Beentje HJ et al. NMK Exped. 841, Fleuret A 8 (EA).

- Vigna vexillata (L.) A.Rich. var. vexillata Habit: Climber. Habitat: Acacia-Commiphora bushland, grassland, cultivations, 1040–1372 m. Vouchers: Watuma BM W0149 (EA, HIB), Mwachala G et al. EW376, Osborn RM 1 (EA).
- Wajira praecox (Verdc.) Thulin & Lavin Habit: Liana. Habitat: Dry Acacia, Terminalia, Commiphora bushland, ca. 640 m. Vouchers: Faden RB & Faden AJ 74/236, Mr & Mrs Hucks M 449 & 840 (EA).
- **Zornia capensis Pers. subsp.** *tropica* **Milne-Redh.** Habit: Herb. Habitat: Rocky places in dry scrub on shallow soil, ca. 500 m. Voucher: Luke WRQ & Luke PA 5577 (EA).

# F82. FRANCOACEAE

1 Genus, 1 species

*Bersama abyssinica* Fresen. – Habit: Tree. Habitat: Secondary evergreen rainforest, 1140–1850 m. Vouchers: Watuma BM W0241 (EA, HIB), Faden RB et al. NMK Exped. 555 (EA).

## F83. GELSEMIACEAE

1 Genus, 1 species

*Mostuea brunonis* **Didr.** – Habit: Shrub. Habitat: Upland rainforest. Voucher: Bally PRO 8710 (EA).

#### F84. GENTIANACEAE

1 Genus, 1 species

Anthocleista grandiflora Gilg – Habit: Herb. Habitat: Upland rainforest, riverine forest, 1225–1550 m. Vouchers: Wakanene KM & Mwangangi OM 690, Mwachala G et al. EW1868, Beentje et al. NMK Exped. 1171, Faden RB et al. 70/521 (EA).

#### F85. GERANIACEAE

2 Genera, 3 species

- Geranium arabicum Forssk. Habit: Herb. Habitat: Upland rainforest margins, bushland and grassland, 1400–2170 m. Vouchers: Faden RB et al. NMK Exped. 6, Faden RB et al. 70/506, Christenhusz MJM, Kamau P, Mbale M & Chase MW 6654 (EA).
- Pelargonium multibracteatum Hochst. ex A.Rich. Habit: Herb. Habitat: Upland rainforest edges, wooded and open grassland, bushland, 875–1800 m. Vouchers: Watuma BM W0192 (EA, HIB), Bally PRO 8758 (EA).
- **Pelargonium quinquelobatum Hochst. ex A.Rich.** Habit: Herb. Habitat: Forest edges, bushland and thicket in rocky slopes, cultivated ground, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 744 (EA).

## F86. GESNERIACEAE

1 Genera, 6 species

- Streptocarpus caulescens Vatke Habit: Herb. Habitat: Moist areas in forest and forest margins, 914–2195 m. Vouchers: SAJIT–004124, 006381, 006390 & 006397, Watuma BM W0016 & W0095 (EA, HIB), Luke WRQ & Luke PA 4110 & 5549, Kirika P et al. NMK 589, Wakanene KM & Mwangangi OM 259 & 409, Christenhusz MJM et al. 6650, Beentje HJ 2150, Faden RB et al. NMK Exped. 4, 194 & 393, Bytebier B 1936 & 1941, Faden RB et al. 69/439, 71/38 & 47, Gillett JB, Burtt BL & Osborn RM 17049, Verdcourt B & Polhill RM 2727, Drummond RB & Hemsley JH 4295, Burtt BL 3823, Hildebrandt JM s.n. (EA).
- *Streptocarpus glandulosissimus* Engl. Habit: Herb. Habitat: Damp shaded areas in forest and forest margins. Vouchers: Joanna B 8997, Bally PRO 13513 (EA).
- NE Streptocarpus kirkii Hook.f. Habit: Herb. Habitat: Forest, 1425–1850 m. Vouchers: SAJIT–006393 & 006424 (EA, HIB), Luke WRQ & Luke PA 4154, Faden RB et al. NMK Exped. 360, Bytebier B 1938, Faden RB et al. 71/38A, Burtt BL 3831, Faden RB & Githui M 70/751, Bally PRO 13605 (EA).
- Streptocarpus montanus Oliv. Habit: Herb. Habitat: Shaded areas in wet montane or sub-montane forest, 1000–2170 m. Vouchers: SAJIT–006347 & 006414 & 006425 (EA, HIB), Luke WRQ & Luke PA 4200, Faden RB et al. NMK Exped. 83 & 196, Bytebier B 1937 & 1940, Drummond RB & Hemsley JH 4319, Gillett JB, Burtt BL & Osborn RM 17091, Faden RB et al. 69/480A & 71/151, Lavranos J 11806, Burtt BL 3830 (EA). Near Threatened.
- NE Streptocarpus saxorum Engl. Habit: Herb. Habitat: Semi-deciduous woodland thicket on cliff faces with constant mist, 600–1070 m. Vouchers: Faden RB, Evans A & Msafiri F 70/972, Knox EB 2716, Gardner HM 3006, Glover 2648, Burtt BL 4824 (EA).
- EStreptocarpus teitensis (B.L.Burtt) Christenh. Habit: Herb. Habitat: Forest rock crevices, cliff faces, 1400–1750 m. Vouchers: SAJIT–005323 & 006426, Watuma BM W0024 (EA, HIB), Simiyu 174, Joanna B 8982, Beentje HJ et al. NMK Exped. 1170 (EA). Critically Endangered.

#### F87. GISEKIACEAE

1 Genus, 1 species

Gisekia pharnaceoides L. – Habit: Herb. Habitat: Ruderal sites, roadsides, cultivated lands, bushland, woodland, 600–914 m. Vouchers: Napier ER 941, Hucks M 708 & 786, MacDonald J 858 (EA).

# F88. HAMAMELIDACEAE

1 Genus, 1 species

*Trichocladus ellipticus* Eckl. & Zeyh. subsp. *malosanus* (Baker) Verdc. – Habit: Tree. Habitat: Upland rainforest, often by streams, 900–1200 m. Voucher: Medley KE 648 (EA).

## F89. HYDNORACEAE

1 Genus, 1 species

*Hydnora abyssinica* A.Br. – Habit: Herb. Habitat: Dry woodland, wooded grassland, bushland, 800–1150 m. Vouchers: Mkala EM 0001 (EA, HIB), Mrs. Robertson SA 6537 (EA).

#### F90. HYPERICACEAE

1 Genus, 3 species

- *Hypericum bequaertii* De Wild. Habit: Shrub. Habitat: Upland evergreen bushland, ca. 1250 m. Voucher: Mungai GM et al. EW3201 (EA).
- *Hypericum conjungens* N.Robson Habit: Herb. Habitat: Forest margins, grassland, dry bush, ca. 1240 m. Voucher: Mwachala G et al. EW3191 (EA).
- *Hypericum peplidifolium* A.Rich. Habit: Herb. Habitat: Upland grassland, streams and marshes, roadside banks, 1466–1814 m. Vouchers: SAJIT–006399 (EA, HIB), Kabuye CHS 82/109, Mwachala G et al. EW210 (EA).

# F91. ICACINACEAE

1 Genus, 1 species

*Pyrenacantha malvifolia* Engl. – Habit: Liana. Habitat: Dry *Acacia-Commiphora* or semi-evergreen bushland and scrub, 500–1650 m. Vouchers: Muchiri J 245, Semlingwa J 20, Leeuwenberg AJM 10783, Hucks M 458, Jeffrey C et al. EPK269, Hildebrandt JM 2355 (EA).

## F92. LAMIACEAE

20 Genera, 50 species

- Aeollanthus densiflorus Ryding Habit: Subshrub. Habitat: Rock crevices, 1700–1875 m. Vouchers: Gillett JB 18750, Drummond & Hemsley 4389, Faden RB et al. NMK Exped. 300 (EA).
- Aeollanthus repens Oliv. Habit: Herb. Habitat: Forest edges, shallow soils on rocks, 810–1875 m. Vouchers: SAJIT–006395, Watuma BM W0113 (EA, HIB), Mwachala G et al. EW757 & 1327, Wakanene KM & Mwangangi OM 739, Beentje HJ et al. NMK Exped. 814 & 858, Medley KE 463, Faden RB et al. NMK Exped. 488 (EA).
- *Clerodendrum cephalanthum* Oliv. subsp. *cephalanthum* Habit: Shrub. Habitat: Evergreen forest, 1425–1850 m. Voucher: Faden RB et al. NMK Exped. 359 (EA).
- *Clerodendrum hildebrandtii* Vatke var. *hildebrandtii* Habit: Shrub/Tree. Habitat: Forest edges, bushland, thickets in scattered tree grassland, 600–1000 m. Vouchers: Medley KE 704 & 945, Hildebrandt JM 2389 (EA).
- Clerodendrum johnstonii Oliv. subsp. johnstonii Habit: Shrub/Liana. Habitat: Moist forest edges, secondary growth, 1600–1875 m. Vouchers: Watuma BM

- W0130 (EA, HIB), Faden RB et al. NMK Exped. 216 & 505, Drummond RB & Hemsley JH 4366, Raler I 0028 (EA).
- Clinopodium abyssinicum (Hochst. ex Benth.) Kuntze var. abyssinicum Habit: Subshrub. Habitat: Upland evevrgreen bushland and grassland, ca. 1600 m. Voucher: Beentje HJ et al. NMK Exped. 1160 (EA).
- Coleus aegyptiacus (Forssk.) A.J.Paton Habit: Subshrub. Habitat: Rocky Acacia-Commiphora bushland, abandoned cultivations, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 713 (EA).
- Coleus sp. nr. amboinicus Lour. Habit: Herb. Habitat: Dry open scrub on red sandy soils, ca. 777 m. Voucher: Kirika P, Rory M, Mbale M NMK 592 (EA).
- Coleus autranii Briq. Habit: Shrub. Habitat: Forest, secondary forest, *Philippia* bushland, 1900–2170 m. Vouchers: Faden RB et al. NMK Exped. 135, Gillett JB, Burtt BL & Osborn RM 17094, Drummond RB & Hemsley JH 4312 (EA).
- Coleus barbatus (Andrews) Benth. ex G.Don Habit: Shrub. Habitat: Forest margins, moist bushland, cultivations, 650–1792 m. Vouchers: Watuma BM W0100 (EA, HIB), Sacleux C 2580, Drummond RB & Hemsley JH 4370, Medley KE 824, Kluguess LM 2, Bally J 13531, Nattrass MS B1158 (EA).
- Coleus caninus (B.Heyne ex Roth) Vatke subsp. flavovirens (Gürke) A.J.Paton Habit: Herb. Habitat: Base of rock outcrops, eroded grassland and Commiphora scrub, ca. 1220 m. Voucher: Mungai GM et al. EW3196 (EA).
- Coleus comosus Hochst. ex Gürke Habit: Subshrub. Habitat: *Philippia* heath, rock crevices, cliffs, 2000–2070 m. Vouchers: Drummond RB & Hemsley JH 4305, Bjørnstad IN IB733 (EA).
- Coleus cylindraceus (Hochst. ex Benth.) A.J.Paton. Habit: Herb. Habitat: Acacia-Commiphora and dry evergreen bushland on rocky outcrops, 609–777 m. Vouchers: Kirika P, Rory M, Mbale M NMK 591, Warao M 63 (EA).
- Coleus gracilis Gürke Habit: Shrub. Habitat: Scrub or thicket on rocky slopes on dry riverbeds, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 645 (EA).
- Coleus grandicalyx E.A.Bruce Habit: Herb. Habitat: Crevices on rocky outcrops on hillslopes, 1740–2100 m. Voucher: Beentje HJ et al. NMK Exped. 903 (EA).
- Coleus hadiensis (Forssk.) A.J.Paton Habit: Herb. Habitat: Acacia-Commiphora and dry evergreen bushland on rocky outcrops, 985–1600 m. Vouchers: Mwachala G et al. EW3177, Faden RB & Faden AJ 74/496, Drummond RB & Hemsley JH 4387, Greenway PJ 10464 (EA).
- *Coleus igniarius* Schweinf. Habit: Shrub. Habitat: Dry rocky hillsides, *Acacia-Commiphora* bushland, ca. 920 m. Voucher: Mwachala G et al. EW3257 (EA).
- Coleus lactiflorus Vatke Habit: Shrub. Habitat: Rocky hillsides, open forest, Acacia woodland, roadsides, 600–1850 m. Vouchers: Beentje HJ et al. NMK Exped. 1042, Gillett JB 18758, Hildebrandt JM 2522 (EA).
- Coleus lanuginosus Hochst. ex Benth. Habit: Herb. Habitat: Forest and forest clearings on rocky outcrops, roadsides, 1400–1640 m. Vouchers: Faden RB et al. NMK Exped. 20 (EA).
- *Coleus longipetiolatus* Gürke Habit: Subshrub. Habitat: Openings and margins of evergreen forest, 900–1300 m. Voucher: Kokwaro JO 4244 (EA).

- Coleus melleri (Baker) A.J.Paton & Phillipson Habit: Subshrub. Habitat: Moist montane margins and clearings, semi-deciduous forest, 700–1600 m. Vouchers: Medley KE 935, Bally PRO 13576 (EA).
- Coleus meyeri (Gürke) A.J.Paton Habit: Shrub. Habitat: Montane forest and associated bushland, 1800–2100 m. Vouchers: SAJIT–004586 (EA, HIB), Drummond RB & Hemsley JH 4317 (EA).
- Coleus nyikensis Baker Habit: Shrub. Habitat: Rocks in grassland or steep slopes, ca. 1500 m. Voucher: Luke WRQ & Luke PA 4198 (EA).
- Coleus otostegioides (Schweinf. ex Gürke) A.J.Paton Habit: Subshrub. Habitat: Dry *Acacia-Commiphora* bushland, often in rocky areas, ca. 600–1100 m. Vouchers: Mwachala G et al. EW212, Gillett JB & Burtt BL 17174, Mrs. Robertson SA 6541 (EA).
- Coleus prostratus (Gürke) A.J.Paton Habit: Herb. Habitat: Acacia scrub often on rocks, ca. 914 m. Vouchers: Ochung HK 95, Greensmith P 16236 (EA).
- NE Coleus triangularis (A.J.Paton) A.J.Paton Habit: Herb. Habitat: Ocotea-Podocarpus evergreen forest, 1425–2100 m. Vouchers: Luke WRQ & Luke PA 5497 & 10806, Faden RB et al. NMK Exped. 222, Beentje HJ et al. NMK Exped. 789, Gillett JB & Burtt BL 17112, Faden RB et al. 70/735, Seki AH et al. JKCAT 1586, Drummond RB & Hemsley JH 4338, Bally PRO 8752, Dale IR 3777, Karimi s.n. (EA). Near Threatened.
- Coleus umbrosus Vatke Habit: Herb. Habitat: Deciduous woodland and bushland, 610–850 m. Vouchers: Gilbert MG & Gilbert CI 6124, Hildebrandt JM 2424 (EA).
- Equilabium kamerunense (Gürke) Mwany. & A.J.Paton Habit: Herb. Habitat: Forest margins, ca. 1800 m. Voucher: Drummond RB & Hemsley JH 4310 (EA).
- Equilabium laxiflorum (Benth.) Mwany. & A.J.Paton Habit: Herb. Habitat: Forest margins and clearings, 1400–2170 m. Vouchers: Faden RB et al. NMK Exped. 96 & 268, Verdcourt B & Polhill RM 2733, Gillett JB 17247, Lavranos JJ & Newton LE 17643, Drummond RB & Hemsley JH 4310, Napier ER 1133 (EA).
- *Equilabium longipes* (Baker) Mwany. & A.J.Paton Habit: Subshrub. Habitat: Seasonally dry bushland or woodland in rocky places, 520–1850 m. Vouchers: Beentje HJ et al. NMK Exped. 367, Faden RB & Faden AJ 74/478, 497 & 508, Gillett JB 17206 (EA).
- Hoslundia opposita Vahl Habit: Shrub. Habitat: Forest, woodland, open grassland, 550–1371 m. Vouchers: Mwachala G et al. EW97, Msafiri F & Ojiambo L 279, Napier ER 953 & 1079, Rauh W 67, Medley KE 493 (EA).
- Leucas grandis Vatke Habit: Herb. Habitat: Upland evergreen bushland, forest undergrowth and margins, 610–1792 m. Vouchers: Watuma BM W0101 (EA, HIB), Hilderbrandt JM 2423, Johnston HH s.n. (EA).
- Leucas neuflizeana Courbon Habit: Herb. Habitat: Deciduous bushland, road-sides, rock outcrops and hillsides, 610–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 597, Hildebrandt JM 2404 (EA).
- NE Leucas oligocephala Hook.f. var. usambarica Sebald Habit: Herb. Habitat: Phillipia thicket openings, grassland, ca. 2050 m. Voucher: Gillett JB 17257 (EA).

- \*Mesosphaerum pectinatum (L.) Kuntze—Habit: Herb. Habitat: Edge of rivers and swamps in thickets and disturbed places, ca. 900 m. Voucher: Mrs. Robertson SA 3568 (EA).
- *Micromeria imbricata* (Forssk.) C.Chr. var. *imbricata* Habit: Subshrub. Habitat: Open woodland or shrubland on sloping ground, 1200–1580 m. Vouchers: Kabuye CHS 82/110, Joanna B 8821 (EA).
- Ocimum americanum L. Habit: Herb. Habitat: Bushland, cultivated and disturbed ground, 503–1010 m. Vouchers: Mwachala G et al. EW131, Napier ER 1002, Medley KE 492, Hucks M 719, Greenway PJ & Kanuri K 13024 (EA).
- Ocimum gratissimum L. subsp. gratissimum Habit: Herb. Habitat: Edges of dry montane forest, disturbed places along river, 900–1850 m. Vouchers: Watuma BM W0109 (EA, HIB), Mwachala G et al. EW818, Wakanene KM & Mwangangi OM 611, Murray High School 18 (EA).
- Orthosiphon thymiflorus (Roth) Sleesen Habit: Herb. Habitat: Open dry forest, wooded grassland, disturbed places, ca. 1000 m. Voucher: Drummond RB & Hemsley JH 4408 (EA).
- Platostoma bildebrandtii (Vatke) A.J.Paton & Hedge Habit: Subshrub. Habitat: Open Acacia-Commiphora or Combretum bushland on rocky ground, 800—1000 m. Vouchers: Kabuye CHS et al. NMK Exped. 598, Hildebrandt JM 2414, Drummond RB & Hemsley JH 4412, Polhill RM & Kibuwa SP 959 (EA).
- *Plectranthus alboviolaceus* Gürke Habit: Shrub. Habitat: Evergreen forest, by paths or rivers, 900–1200 m. Voucher: Bally PRO 13300 (EA).
- *Premna hildebrandtii* Gürke Habit: Shrub/Tree. Habitat: Woodland, riverine thicket, 800–1525 m. Vouchers: Joanna B & Opiko 8777, Bally PRO 8639 (EA).
- *Premna oligotricha* Baker Habit: Shrub. Habitat: *Acacia-Commiphora* bushland and woodland, 520–1000 m. Vouchers: Faden RB & Faden AJ 74/476 & 507, Medley KE 481 & 772, Elliot S 6202 (EA).
- Rotheca myricoides (Hochst.) Steane & Mabb. subsp. myricoides Habit: Shrub. Habitat: Forest, grassland, scrub thicket, open woodland, 1250–1400 m. Vouchers: Mwachala G et al. EW385, 591 & 1252, Luke WRQ et al. 5550, Bally JB 13508 (EA).
- Stachys aculeolata Hook.f. var. aculeolata Habit: Herb. Habitat: Forest and secondary forest margins, 1800–2100 m. Vouchers: Drummond RB & Hemsley JH 4325, Faden RB et al. NMK Exped. 137 & 1132 (EA).
- **Tetradenia urticifolia** (Baker) Phillipson Habit: Shrub. Habitat: Forest margins, woodland and bushland, 700–1571 m. Vouchers: Watuma BM W0206 (EA, HIB), Nattrass RM B1156 (EA).
- *Tinnea aethiopica* Kotschy ex Hook.f. subsp. *aethiopica* Habit: Subshrub. Habitat: Deciduous woodland and bushland, riverine forest and scrub, 750–1200 m. Vouchers: Watuma BM W0148 (EA, HIB), Goyder et al. 4019 (EA).
- *Tinnea aethiopica* Kotschy ex Hook.f. subsp. *litoralis* Vollesen Habit: Subshrub. Habitat: *Acacia-Commiphora* bushland, 550–650 m. Vouchers: Medley KE 482 & 984 (EA).
- *Tinnea aethiopica* Kotschy ex Hook.f. subsp. *stolzii* (Robyns & Lebrun) Vollesen Habit: Subshrub. Habitat: Deciduous woodland and bushland, ca. 900 m. Voucher: Luke WRQ & Luke PA 4096 (EA).

- *Vitex fischeri* Gürke var. *keniensis* (Turrill) Meerts Habit: Tree. Habitat: Evergreen forest, 1386–1875 m. Vouchers: Watuma BM W0236 (EA, HIB), Faden RB et al. NMK Exped. 466 (EA). Endangered.
- *Vitex strickeri* Vatke & Hildebr. Habit: Shrub. Habitat: Forest edges, bushland, thickets, rockyoutcrops, 850–1875 m. Vouchers: Kabuye CHS 82/51, Mwachala Getal. EW1206, Faden RB et al. NMK Exped. 515 & 1106, Gardner HM 2989, Kluguess LM 50 (EA).
- Volkameria eriophylla (Gürke) Mabb. & Y.W.Yuan Habit: Shrub. Habitat: Grassland, Acacia-Commiphora-Combretum bushland and scrub, 762–1100 m. Vouchers: Cheseny CMC 27/72, Polhill RM & Kibuwa SP 973 (EA).

#### F93. LAURACEAE

4 Genera, 4 species

- \*Cinnamomum camphora (L.) J.Presl Habit: Tree. Habitat: Remnant mist forest fragment, 1700–1800 m. Vouchers: Mwachala G et al. EW106, Christenhusz MJM, Kamau P, Mbale M, Chase MW & Kyaa J 6679 (EA).
- *Cryptocarya liebertiana* Engl. Habit: Tree. Habitat: Evergreen forest, by rivers, 1425–1850 m. Voucher: Faden RB et al. NMK Exped. 957 (EA).
- *Kuloa usambarensis* (Engl.) Trofimov & Rohwer Habit: Tree. Habitat: Intermediate to montane evergreen wet forest, 1600–1978 m. Vouchers: Watuma BM W0306 (EA, HIB), Faden RB & Githui M 70/746, Faden RB, Faden AJ & Smeenk C 71/1019, Faden RB & Faden AJ 72/267 (EA).
- Ocotea kenyensis (Chiov.) Robyns & R.Wilczek Habit: Tree. Habitat: Upland rainforest, 1440–1875 m. Vouchers: Faden RB et al. NMK Exped. 212, Faden RB, Evans A, Msafiri & Smeenk C 71/48 (EA). Vulnerable.

## F94. LINDERNIACEAE

3 Genera, 3 species

- *Craterostigma plantagineum* Hochst. Habit: Herb. Habitat: Shallow soil over rock, 1850–1870 m. Voucher: Watuma BM W0065 (EA, HIB).
- NE Linderniella brevidens (Skan) Eb.Fisch., Schäferh. & Kai Müll. Habit: Herb. Habitat: Rocky hillsides, forest clearings, weed of cultivation, 1700–2200 m. Vouchers: Faden RB et al. NMK Exped. 494, Friis I & Hansen OJ 2676 (EA).
- Stemodiopsis buchananii Skan Habit: Herb. Habitat: Crevices in boulders and rock cliffs, 686–750 m. Vouchers: Faden RB & Faden AJ 74/258, Verdcourt B 3896, Bally PRO 8800 (EA).

## F95. LOGANIACEAE

1 Genus, 7 species

Strychnos decussata (Pappe) Gilg – Habit: Tree. Habitat: Deciduous bushland near rocks, 450–880 m. Vouchers: Medley KE 416, 465 & 654, Gillett JB 21066, Joanna B 8853 (EA).

- Strychnos henningsii Gilg Habit: Shrub/Tree. Habitat: Upland rainforest, semi-evergreen bushland, riverine forest, 650–1850 m. Vouchers: SAJIT–005413 (EA, HIB), Faden RB et al. NMK Exped. 785, Faden RB, Faden AJ, Smeenk C, Smeenk N & McNee J 71/974, Medley KE 484 & 917 (EA).
- Strychnos madagascariensis Poir. Habit: Shrub/Tree. Habitat: Deciduous bushland and woodland, 650–1140 m. Vouchers: Mwachala G et al. EW141, Mungai GM et al. EW2658, Medley KE 541, 724 & 749, Joanna B 8895 (EA).
- Strychnos spinosa Lam. Habit: Shrub/Tree. Habitat: Deciduous bushland and woodland, 550–1000 m. Vouchers: Kabuye CHS et al. NMK Exped. 600, Mwachala G et al. EW963, 1571 & 3329, Medley KE 576, 613 & 950 (EA).
- Strychnos mitis S.Moore Habit: Tree. Habitat: Upland rainforest, riverine forest, 1200–1850 m. Vouchers: SAJIT–005389 (EA, HIB), Raler I 0066, Faden RB & Githui M 70/723 (EA).
- Strychnos panganensis Gilg Habit: Shrub. Habitat: Rainforest, evergreen bushland, ca. 1150 m. Voucher: Mwachala G et al. EW582 (EA).
- Strychnos usambarensis Gilg Habit: Shrub/Tree. Habitat: Upland rainforest, evergreen bushland, ca. 950 m. Voucher: Mwachala G et al. EW1276 (EA).

# F96. LOPHIOCARPACEAE

1 Genus, 1 species

Corbichonia decumbens (Forssk.) Exell – Habit: Herb. Habitat: Open bushland, grassland, roadside and cultivations, 579–600 m. Voucher: Napier ER 989 (EA).

#### F97. LORANTHACEAE

8 Genera, 15 species

- Agelanthus heteromorphus (A.Rich.) Polhill & Wiens Habit: Shrub. Habitat: Bushland, 960–1000 m. Vouchers: Mwachala G et al. EW3555, van Someren C et al. NMK Exped. 1033, 1034 & 1035 (EA).
- Agelanthus oehleri (Engl.) Polhill & Wiens Habit: Shrub. Habitat: Deciduous bushland, grassland with scattered trees, 600–1200 m. Vouchers: Wakanene KM & Mwangangi OM 482, Gillett JB 16875 (EA).
- Agelanthus sansibarensis (Engl.) Polhill & Wiens Habit: Shrub. Habitat: Montane and dry hill forest, bushland, 609–1402 m. Vouchers: SAJIT–005403 (EA, HIB), Mwachala G et al. EW762 & 1347, Joanna B 8889, Josnell I 744 (EA).
- Emelianthe panganensis (Engl.) Danser Habit: Shrub. Habitat: Deciduous bushland on Euphorbia, Adansonia & Sterculia, 500–650 m. Vouchers: van Someren C et al. NMK Exped. 1038, Polhill RM 4772, Archer PG 450, Gardiner N 3012, Napier ER 1003 (EA).
- Emelianthe panganensis (Engl.) Danser subsp. commiphorae Wiens & Polhill Habit: Shrub. Habitat: Deciduous bushland, wooded grassland on Commiphora, Sterculia and Lannea, ca. 500–700 m. Voucher: Hucks M 451 (EA).

- Englerina drummondii Balle ex Polhill & Wiens Habit: Herb. Habitat: Dry evergreen forest, hilltop mist forest, wooded grasslands, 1040–1640 m. Vouchers: Kabuye CHS 82/46, Mwachala G et al. 223, 224 & EW810, Luke WRQ et al. 4133 (EA). Vulnerable.
- Englerina sp. nr. kagehensis (Engl.) Polhill & Wiens Habit: Herb. Habitat: Upland forest, 1230–1300 m. Voucher: Faden RB et al. 71/999 (EA).
- *Englerina woodfordioides* (Schweinf.) Balle Habit: Shrub. Habitat: Montane or riverine forest and associated bushland, 1371–1402 m. Vouchers: Joanna B 8876 & 8925 (EA).
- *Erianthemum commiphorae* (Engl.) Danser Habit: Shrub. Habitat: Deciduous bushland on *Acacia*, *Commiphora*, *Euphorbia* and *Lannea*, 600–800 m. Voucher: Joanna B 8993 (EA).
- *Erianthemum dregei* (Eckl. & Zeyh.) Tiegh. Habit: Shrub. Habitat: Forest edges, woodland, bushland and disturbed places, 960–1875 m. Vouchers: Mwachala G et al. EW608 & 1000, Wakanene KM & Mwangangi OM 449, Joanna B & Opiko B 8768 & 8768A, Faden RB et al. NMK Exped. 336, Medley KE 819, Hucks M 895 (EA).
- *Helixanthera kirkii* (Oliv.) Danser Habit: Shrub. Habitat: Deciduous woodland, 700–900 m. Voucher: SAJIT–005406 (EA, HIB).
- Oliverella hildebrandtii (Engl.) Tiegh. Habit: Shrub. Habitat: Deciduous bushland, 650–1850 m. Vouchers: Mwachala G et al. EW3115A, Luke WRQ & Bytebier B 5258, Hildebrandt JM 2523, Beentje HJ et al. NMK Exped. 1016, Faden RB, Evans A, Rathbun G 69/418, Medley KE 798, Napper D 950, Gilbert MG 6100, Joanna B & Opiko 8778 & 9078 (EA).
- Oncocalyx fischeri (Engl.) M.G.Gilbert Habit: Shrub. Habitat: Dry evergreen forest, 950–1270 m. Vouchers: Mwachala G et al. EW3155, Gillett JB 19581 (EA).
- Plicosepalus curviflorus (Benth. ex Oliv.) Tiegh. Habit: Shrub. Habitat: Deciduous bushland and *Acacia* woodland, 503–1402 m. Vouchers: Mwachala G et al. EW382 & 382A, Gilbert MG & Gilbert CI 6123 & 6123A, Medley KE 764, Bally PRO 8552, Joanna B & Opiko 8870 (EA).
- *Plicosepalus meridianus* (Danser) Wiens & Polhill Habit: Shrub. Habitat: Deciduous bushland on *Commiphora* and *Acacia*, 610–900 m. Vouchers: SAJIT–005370 (EA, HIB), Medley KE 782 (EA).
- *Plicosepalus sagittifolius* (Engl.) Danser Habit: Shrub. Habitat: Deciduous bushland and *Acacia* woodland, 600–1000 m. Vouchers: Mungai GM et al. EW1317, Cheseny CMC 16/72, Gillett JB 19587, Hucks M 959 (EA).

## F98. LYTHRACEAE

1 Genus, 1 species

Ammannia prieuriana Guill. & Perr. – Habit: Herb. Habitat: Along rivers and damp places, ca. 1100 m. Voucher: Mungai G et al. EW1307 (EA).

## F99. MALPHIGIACEAE

2 Genera, 2 species

- Caucanthus auriculatus (Radlk.) Nied. Habit: Liana. Habitat: Dry evergreen forest, deciduous woodland and bushland, 650–1000 m. Vouchers: Watuma BM W0182 (EA, HIB), Mwachala G et al. EW857, Medley KE 867 & 937 (EA).
- EAcridocarpus taitensis Mwadime, Ngumbau & Q.Luke Habit: Liana. Habitat: Forest margins, 1728–1800 m. Vouchers: Watuma BM W0061 (EA, HIB), Mwadime N 2379, Faden RB et al. NMK Exped. 525, Drummond & Hemsley 4331 (EA).

# F100. MALVACEAE

21 Genera, 58 species

- *Abutilon longicuspe* Hochst. ex A.Rich. Habit: Subshrub. Habitat: *Acacia* woodland, forest and forest edges, 1250–1676 m. Vouchers: Mwachala G et al. EW1250, Kluguess LM 22 (EA).
- Abutilon mauritianum (Jacq.) Medik. subsp. mauritianum Habit: Subshrub. Habitat: Upland bushland, forest edges, Acacia woodland, roadside, cultivations, 686–1569 m. Vouchers: Watuma BM W0281 (EA, HIB), Verdcourt B 3890, Hildebrandt JM 2633 (EA).
- Abutilon mauritianum (Jacq.) Medik. var. epilosum Verdc. Habit: Subshrub. Habitat: Acacia-Commiphora bushland and thicket, forest edges and clearings, ca. 1050 m. Voucher: Luke WRQ & Luke PA 5309 (EA).
- NE Abutilon mauritianum (Jacq.) Medik. var. grandiflorum Verdc. Habit: Subshrub. Habitat: Forest, near stream, secondary scrub, bushland, ca. 1350–1650 m. Vouchers: Jex-Blake M 2313, Joanna B 8965, Gardner HM 2984 (EA).
- Adansonia digitata L. Habit: Tree. Habitat: Woodland, deciduous bushland, 600–1250 m. Vouchers: Joanna B 9056, Medley KE p.r. (EA).
- \*Callianthe megapotamica (A.Spreng.) Dorr Habit: Shrub. Habitat: Hillslopes around homes and cultivated lands, ca. 1500 m. Voucher: SAJIT-004120 (EA, HIB).
- Cola greenwayi Brenan Habit: Tree. Habitat: Evergreen forest, 1425–1875 m. Vouchers: Faden RB et al. NMK Exped. 458 & 771, Beentje HJ et al. NMK Exped. 886, Faden RB, Evans A Rathbun G 69/463, Faden RB & Githui M 70/721, Faden RB & Faden AJ 71/975, Medley KE 440 & 999 (EA).
- Corchorus tridens L. Habit: Herb. Habitat: Cultivated lands, sandy and waterlogged soils, ca. 609 m. Voucher: Napier ER 904 (EA).
- Corchorus urticifolius Wight & Arn. Habit: Herb. Habitat: Dense Commiphora bushland on sandy soils, 800–1100 m. Voucher: Mwachala G et al. EW569 (EA).
- *Dombeya kirkii* Mast. Habit: Shrub/Tree. Habitat: Forest edge, *Acacia* bushland on rocky slopes, 650–1000 m. Vouchers: SAJIT–005378 (EA, HIB), Kabuye CHS et al. NMK Exped. 737, Mwachala G et al. EW969, Maikweki J 2, Medley KE 455, Gillett JB 17229, Gardner HM 2985, Verdcourt B 5319, Agnew ADQ & Agnew S 11185 (EA).

- *Dombeya rotundifolia* (Hochst.) Planch. Habit: Tree. Habitat: Forest edge, woodland, wooded grassland, 1200–1676 m. Vouchers: Kabuye CHS 82/147, Mungai GM et al. EW3171, Gardner HM 1200 (EA).
- *Dombeya torrida* (J.F.Gmel.) Bamps Habit: Tree. Habitat: Open forest and forest edges, disturbed forest, 2000–2170 m. Voucher: Faden RB et al. NMK Exped. 81 (EA).
- Gossypioides kirkii (Mast.) Skovst. Ex J.B.Hutch. Habit: Shrub. Habitat: Forest edges, bushland with scattered trees, 650–1000 m. Voucher: Medley KE 579 (EA).
- Grewia arborea (Forssk.) Lam. Habit: Shrub. Habitat: Open woodland, Acacia-Commiphora bushland, thicket, 650–1000 m. Voucher: Goyder DJ, Masinde PS, Meeve U, Whitehouse C et al. 4016, Faden RB & Faden AJ 74/270, Medley KE 849 (EA).
- *Grewia bicolor* Juss. Habit: Shrub. Habitat: Woodland, *Commiphora-Acacia* bushland, 500–950 m. Vouchers: SAJIT–005390 (EA, HIB), Kabuye CHS et al. NMK Exped. 640, Mwachala G et al. EW77 & 508, Bally PRO 8624, Napier ER 986, Zùmer M 54 (EA).
- *Grewia forbesii* Harv. ex Mast. Habit: Shrub/Liana. Habitat: Evergreen dense bushland, deciduous woodland, secondary vegetation, 550–1000 m. Vouchers: SAJIT–004630 & 005407, Watuma BM W0011 (EA, HIB), Medley KE 450 & 530, Faden RB & Faden AJ 74/501 (EA).
- Grewia mollis Juss. Habit: Shrub. Habitat: Forest, open woodland, Combretum open grassland, 1200–1467 m. Vouchers: Watuma BM W0242 (EA, HIB), Wakanene KM & Mwangangi OM 475 (EA).
- Grewia nematopus K.Schum. Habit: Shrub. Habitat: Woodland, bushland, open bushland, 600–950 m. Vouchers: Medley KE 902, Faden RB & Faden AJ 74/439, Gillett JB, Burtt BL 17176, Engler A 1941, Archer PG 262, Ossent J s.n. (EA).
- *Grewia plagiophylla* K.Schum. Habit: Shrub. Habitat: Forest, riverine thicket, *Acacia-Commiphora* bushland, 450–1000 m. Vouchers: Medley KE 513, 697, 811 & 1021, Lavranos JJ 11892 (EA).
- Grewia similis K.Schum. Habit: Shrub. Habitat: Woodland, thicket, bushland and grassland, 750–1750 m. Vouchers: SAJIT–004123, Watuma BM W0169 & W0320 (EA, HIB), Kabuye CHS 82/38 & 153, Mwachala G et al. EW47, 1195, 1253 & 3182, Wakanene KM & Mwangangi OM 545, Beentje HJ 3280, Medley KE 442, 575 & 982 (EA).
- *Grewia tephrodermis* K.Schum. Habit: Shrub. Habitat: *Acacia* or *Commiphora* bushland, along dry water courses, 550–1070 m. Vouchers: Mwachala G et al. EW1371, Medley KE 421, 539 & 752 (EA).
- Grewia trichocarpa Hochst. ex A.Rich. Habit: Shrub. Habitat: Riverine forest, scattered tree grassland, *Acacia* bush, ca. 950 m. Voucher: Mwachala G et al. EW957 (EA).
- *Grewia truncata* Mast. Habit: Shrub. Habitat: Thicket and bushland, along river courses, 650–1000 m. Voucher: Medley KE 568 (EA).
- *Grewia villosa* Willd. Habit: Shrub. Habitat: Dry *Acacia-Commiphora* bushland, 550–882 m. Vouchers: Watuma BM W0180 (EA, HIB), Faden RB & Faden AJ 74/462, Lubai lK HB21, Medley KE p.r. (EA).

- Hermannia exappendiculata (Mast.) K.Schum. ex Engl. Habit: Shrub. Habitat: Acacia-Commiphora bushland, roadsides, cultivations, 660–900 m. Vouchers: Mwachala G et al. EW942, Faden RB, Evans A & Smeenk C 71/115, Faden RB & Faden AJ 74/280, Gilbert MG & Gilbert CI 6099, Napier ER 982 (EA).
- *Hermannia glanduligera* K.Schum. Habit: Herb. Habitat: *Acacia* bushland, woodland, road edges, old cultivation, 600–915 m. Vouchers: Hildebrandt JM 2385, Verdcourt B 5313 (EA).
- *Hermannia oliveri* K.Schum. Habit: Subshrub. Habitat: Dry *Acacia* or *Commiphora* bushland, 500–650 m. Vouchers: Greenway PJ & Kanuri K 10463, MacDonald J 868 (EA).
- *Hermannia uhligii* Engl. Habit: Shrub. Habitat: *Acacia-Commiphora* bushland or grassland, 600–950 m. Voucher: Luke WRQ & Luke PA 4249 (EA).
- *Hibiscus calyphyllus* Cav. Habit: Shrub. Habitat: Forest edges, riverine forest, bushland, 650–1048 m. Vouchers: Watuma BM W0165 (EA, HIB), Kabuye CHS et al. NMK Exped. 738, Medley KE 740 (EA).
- *Hibiscus cannabinus* L. Habit: Herb. Habitat: Forest margin, *Acacia* woodland and scrub, wooded grassland, 1795–1800 m. Voucher: Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J et al. 6676 (EA).
- *Hibiscus diversifolius* Jacq. Habit: Shrub. Habitat: Edges of gallery forest, riverbanks, drainage paths in forests, 650–1000 m. Vouchers: Medley KE 597 & 806 (EA).
- *Hibiscus fuscus* Garcke Habit: Herb. Habitat: Forest, grassland, bushland, 1250–1582 m. Vouchers: Watuma BM W0248 & W0256 (EA, HIB), Mwachala G et al. EW1250 (EA).
- *Hibiscus greenwayi* Bakerf. Habit: Shrub. Habitat: *Acacia-Commiphora* bushland, 600–1370 m. Vouchers: Mwachala G et al. EW191, Tengecho 2, Joanna B 8894 (EA). Vulnerable.
- *Hibiscus kabuyeanus* Mwachala Habit: Herb. Habitat: Edges of dry woodland, 500–1000 m. Vouchers: Mwachala G et al. EW192, Medley KE 816, Greenway PJ & Kanuri K 12683 (EA).
- \*Hibiscus lunariifolius Willd. Habit: Herb. Habitat: Seasonally flooded woodland and disturbed habitats, 850–1050 m. Voucher: Mwachala G et al. EW933 (EA).
- *Hibiscus macranthus* Hochst. ex A.Rich. Habit: Subshrub. Habitat: Forest edges, cleared forest, bushland, 1030–1150 m. Vouchers: Watuma BM W0323 (EA, HIB), Mungai G et al. EW1394 (EA).
- *Hibiscus micranthus* L.f. Habit: Shrub. Habitat: *Acacia* bushland and grassland, 500–650 m. Vouchers: Hucks M 903, Medley KE p.r. (EA).
- *Hibiscus ovalifolius* (Forssk.) Vahl Habit: Shrub. Habitat: Forest, woodland, bushland, grassland, 800–1050 m. Vouchers: Mwachala G et al. EW936 (EA).
- *Hibiscus physaloides* Guill. & Perr. Habit: Herb. Habitat: Woodland, abandoned cultivations, 800–850 m. Voucher: Mwachala G et al. EW750 (EA).
- *Hibiscus surattensis* L. Habit: Herb. Habitat: Bushland, grassland and forest, 600–1150 m. Vouchers: SAJIT–005350 (EA, HIB), Napier ER 991 (EA).

- *Hibiscus vitifolius* L. Habit: Herb. Habitat: *Acacia-Commiphora* bushland, grassland, ca. 600–700 m. Vouchers: Gillett JB & Burtt BL 17173, Hildebrandt JM 2851 (EA).
- *Kosteletzkya adoensis* (Hochst. ex A.Rich.) Mast. Habit: Subshrub. Habitat: Montane forest edges, secondary growth and clearings, near streams, ca. 1030 m. Voucher: Mwachala G et al. EW800 (EA).
- Leptonychia usambarensis K.Schum. Habit: Tree. Habitat: Moist forest, 1500–1925 m. Vouchers: Watuma BM W0059 & W0134 (EA, HIB), Wakanene KM & Mwangangi OM 675, Faden RB et al. NMK Exped. 236 & 459, Beentje HJ et al. NMK Exped. 868, von Someren & Beentje HJ et al. NMK Exped. 1050, Faden RB & Evans A 69/882, Raler I 0142 (EA).
- \*Malva verticillata L. Habit: Herb. Habitat: Forest, bushland, stream banks, cultivation and waste grounds, ca. 1800 m. Voucher: Drummond RB & Hemsley JH 4286 (EA).
- *Melhania rotundata* Hochst. ex Mast. Habit: Herb. Habitat: Open to dense *Acacia-Commiphora* woodland or bushland, ca. 650 m. Voucher: Faden RB & Faden AJ 74/456 (EA).
- *Melhania velutina* Forssk. Habit: Herb. Habitat: *Acacia, Commiphora, Combretum, Terminalia* woodland, bushland, cultivated areas, 800–1180 m. Vouchers: Kabuye CHS et al. NMK Exped. 688, Mwachala G et al. EW121, 355, 1238 & 1687, Friis I & Hansen OJ 2647, Bally PRO 1304 (EA).
- Pavonia burchellii (DC.) R.A.Dyer Habit: Shrub. Habitat: Forest margins, woodland, rocky places and cultivations, 960–1050 m. Vouchers: Mwachala G et al. EW1348, Mungai GM et al. EW1364 (EA).
- Pavonia urens Cav. Habit: Subshrub. Habitat: Forest margins and clearings, 1250–2000 m. Vouchers: Mwachala G et al. EW1258, Faden RB et al. NMK Exped. 8 & 816, Beentje HJ et al. NMK Exped. 932 (EA).
- Sida acuta Burm.f. Habit: Subshrub. Habitat: Forest edges, bushland, grassland, 1059–1599 m. Vouchers: Watuma BM W0142 & W0155 (EA, HIB).
- Sida ovata Forssk. Habit: Subshrub. Habitat: Acacia-Commiphora bushland and thicket, 550–650 m. Vouchers: Medley KE 971 & 1006b (EA).
- *Sida rhombifolia* L. Habit: Subshrub. Habitat: Forest margins, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 520 (EA).
- *Sida schimperiana* Hochst. ex A.Rich. Habit: Shrub. Habitat: Forest edges, plantation forest, *Acacia* woodland, rocky places, 1600–1875 m. Vouchers: Faden RB et al. NMK Exped. 533, Beentje HJ et al. NMK Exped. 1157 (EA).
- *Sparrmannia ricinocarpa* (Eckl. & Zeyh.) Kuntze Habit: Subshrub. Habitat: Forest patches, secondary bushland, 1900–2170 m. Vouchers: Faden RB et al. NMK Exped. 127, Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J et al. 6657 (EA).
- Sterculia africana (Lour.) Fiori Habit: Tree. Habitat: Acacia-Combretum dry bushland, 500–914 m. Vouchers: Mwachala G et al. EW1515, Mwachala G, Mungai G & Peris K 213, Muasya S 47, Battiscombe E 166 (EA).
- Sterculia rhynchocarpa K.Schum. Habit: Tree. Habitat: Acacia-Commiphora woodland and bushland, 420–760 m. Vouchers: Kabuye CHS 82/96, Medley KE 434, Faden RB & Faden AJ 74/287, Napier ER 1053, Braun 1541 (EA).

- Sterculia stenocarpa H.J.P.Winkl. Habit: Tree. Habitat: Commiphora-Terminalia-Combretum-Acacia dry bushland, 600–750 m. Vouchers: Faden RB & Faden AJ 74/259, Winkler 4047, Greenway PJ & Kanuri K 12676, Hucks M 448 (EA).
- *Thespesia garckeana* F.Hoffm. Habit: Tree. Habitat: Wooded grassland, bushland, roadside, 950–1080 m. Vouchers: Mwachala et al. EW1230 & 3179 (EA).
- *Triumfetta annua* L. Habit: Subshrub. Habitat: Forest clearings and tracks, shade in woodland and bushland, 1587–1875 m. Vouchers: Watuma BM W0227 (EA, HIB), Faden RB et al. NMK Exped. 529 (EA).
- *Triumfetta rhomboidea* Jacq. Habit: Subshrub. Habitat: Rainforest clearings, weed of cultivation, ca. 1480 m. Voucher: Hemp A 5236 (EA).
- Waltheria indica L. Habit: Herb. Habitat: Weed of dry bushland and grassland, disturbed places, cultivation, 500–1580 m. Vouchers: Kabuye CHS 82/116, Mwachala G et al. EW1210, Mungai GM et al. EW1362, Wakanene KM & Mwangangi OM 292, Waita J 41, Jonsell BE 2044, Medley KE 985, Hildebrandt JM 2468, Napier ER 963, Hucks M 1133 (EA).

## F101. MELASTOMATACEAE

3 Genera, 3 species

- Heterotis rotundifolia (Sm.) Jacq.-Fél. Habit: Herb. Habitat: Margins of rainforest, riverine thickets, 620–920 m. Vouchers: Mwachala G et al. EW1552 & 1674, Stone RD, Gitau D & Mwadime P 2413, Muasya J, Nyamongo D & Sang'any S 02/2006/16, Bally 13572 (EA).
- NE Memecylon greenwayi Brenan Habit: Tree. Habitat: Rainforest, 1040–1480 m. Vouchers: Luke WRQ & Luke PA 4160, Stone G, Gitau D & Mwadime P 2412, De Block P et al. 369, Medley KE 670 (EA).
- EMemecylon teitense Wickens Habit: Tree. Habitat: Upland rainforest, 1440–1950 m. Vouchers: Watuma BM W0290 (EA, HIB), Faden RB et al. NMK Exped. 303, Faden RB et al. 71/45, 984, 70/537 & 741, Drummond RB & Hemsley JH 4363, De Block P et al. 494, Stone RD et al. 2411 & 2414, Seki T et al. 1592, Raler I 0052 (EA). Vulnerable.

## F102. MELIACEAE

6 Genera, 12 species

- Azadirachta indica A.Juss. Habit: Tree. Habitat: Cultivated in villages. Voucher: Ossent JR s.n. (EA).
- *Ekebergia capensis* Sparrm. Habit: Tree. Habitat: Understorey often at edges in montane and mid-altitude forests, 900–1875 m. Vouchers: Mwachala G et al. EW914, Faden RB et al. NMK Exped. 344, 460, 541 & 881, Faden RB et al. 72/207, Raler I 0047 (EA).

- Lepidotrichilia volkensii (Gürke) J.-F.Leroy Habit: Tree. Habitat: Montane and mid-altitude forest, 1425–1875 m. Vouchers: SAJIT–006388, Watuma BM W0088 & W0210 (EA, HIB), Faden RB et al. NMK Exped. 219 & 399, Beentje HJ et al. NMK Exped. 43, Raler I 0030 (EA).
- \*Melia azedarach L. Habit: Tree. Habitat: Secondary grasslands and thickets, 850–1100 m. Voucher: Kluguess LM 13 (EA).
- *Melia volkensii* Gürke Habit: Tree. Habitat: *Acacia-Commiphora* deciduous bushland, 550–1000 m. Voucher: Medley KEM p.r. (EA).
- *Trichilia emetica* Vahl Habit: Tree. Habitat: Riparian forest and woodland, 800–1400 m. Vouchers: Kabuye CHS et al. NMK Exped. 657, Mwachala G et al. EW519, 1345, 2555 & 2590, Medley KE 879, Hucks M 878 (EA).
- Turraea holstii Gürke Habit: Shrub/Tree. Habitat: Understorey and margins of montane and mid-altitude forest, 1000–1985 m. Vouchers: Watuma BM W0077 (EA, HIB), Wakanene KM & Mwangangi OM 643 & 732, De Block P et al. 297, Raler I 0044, Faden RB et al. NMK Exped. 220, Beentje HJ et al. NMK Exped. 849 & 1111, Faden RB & Evans A 69/880, Christenhusz MJM et al. 6632, Medley KE 661 & 936, Bally PRO 8784, Gardner HM 2992 (EA).
- Turraea mombassana Hiern ex C.DC. subsp. cuneata (Gürke) Styles & F.White Habit: Shrub. Habitat: Dry forest, bushland and thicket, rocky slopes, ca. 1640 m. Voucher: Kabuye CHS 82/45 (EA).
- *Turraea mombassana* Hiern ex C.DC. subsp. *mombassana* Habit: Shrub. Habitat: Evergreen forest undergrowth and margins, secondary forest, 650–1100 m. Vouchers: Mwachala G et al. EW3507, Medley KE 924 (EA).
- *Turraea nilotica* Kotschy & Peyr. Habit: Shrub/Tree. Habitat: Woodland and bushland, 650–1500 m. Vouchers: Medley KE 558, Joanna B 8906, Sacleux C 2355 (EA).
- *Turraea parvifolia* Deflers Habit: Shrub. Habitat: *Acacia-Commiphora* bushland, rocky outcrops, ca. 1500 m. Voucher: Mwachala G et al. EW3052A (EA).
- Turraea robusta Gürke Habit: Shrub/Tree. Habitat: Evergreen forest, edges of mid-altitude and riparian forest, 800–1875 m. Vouchers: SAJIT–004114, Watuma BM W0080 & W0204 (EA, HIB), Kabuye CHS 82/91, Mwachala G et al. EW525 & 935, Mungai GM et al. EW1298 & 1404, Napier ER 1093, Dale IR 2007 (EA).
- *Turraea wakefieldii* Oliv. Habit: Shrub. Habitat: Secondary forest and bushland, ca. 600 m. Vouchers: Ossent JR 130, Wilson J 53 (EA).

# F103. MENISPERMACEAE

5 Genera, 6 species

Chasmanthera dependens Hochst. – Habit: Liana. Habitat: Lowland rainforest, montane woodland, rocky outcrops and dry riverbeds, 650–1100 m. Vouchers: Mwachala G et al. EW209, Archer PG 623, Medley s.r. (EA).

- *Cissampelos mucronata* A.Rich. Habit: Liana. Habitat: Deciduous bushland, riverine forest, cultivated lands, 600–1000 m. Vouchers: Mungai GM et al. EW1667, Medley KE 776 (EA).
- Cissampelos pareira L. Habit: Climber. Habitat: Upland and lowland rainforest, bushed grassland, 850–1875 m. Vouchers: Mwachala G et al EW 62, 911, 1199A & 1200 (EA), Faden RB et al. NMK Exped. 592 (EA).
- *Hyalosepalum caffrum* (Miers) Troupin Habit: Liana. Habitat: Upland rainforest, deciduous bushland, rocky outcrops, 823–862 m. Vouchers: SAJIT-004627 (EA, HIB), Polhill RM & Kibuwa SP 965 (EA).
- *Tiliacora funifera* (Miers) Oliv. Habit: Liana. Habitat: Upland rainforest, riverine forest, moist shady places in woodland, 1300–1875 m. Vouchers: De Block P, Muasya, Stieperaere H & Bytebier B 287, Raler I 0096, Faden RB et al. NMK Exped. 510, Medley KE 614 & 1017, Faden RB et al. 71/238 (EA).
- *Triclisia sacleuxii* (Pierre) Diels Habit: Liana. Habitat: Lowland rainforest, riverine forest, 1050–1200 m. Voucher: Bally PRO 8575 (EA).

# F104. METTENIUSACEAE

1 Genus, 1 species

*Apodytes dimidiata* E.Mey. ex Arn. – Habit: Tree. Habitat: Evergreen forest, mostly disturbed, 650–1550 m. Vouchers: SAJIT–005348 (EA, HIB), Beentje HJ et al. NMK Exped. 840 & 1113, Medley KE 679 & 788 (EA).

## F105. MOLLUGINACEAE

2 Genera, 2 species

- *Hypertelis umbellata* (Forssk.) Thulin Habit: Herb. Habitat: Weed of roadsides and cultivated places, ca. 609 m. Voucher: Napier ER 902 (EA).
- **Paramollugo nudicaulis** (Lam.) Thulin Habit: Herb. Habitat: Weed of roadsides waste and cultivated places, ca. 609 m. Voucher: Napier ER 1020 (EA).

#### F106. MONIMIACEAE

1 Genus, 1 species

Xymalos monospora (Harv.) Baill. – Habit: Tree. Habitat: Upland rainforest, 1400–2170 m. Vouchers: SAJIT–004536 & 005313, Watuma BM W0103 (EA, HIB), Wakanene KM & Mwangangi OM 380 & 667, Faden RB et al. NMK Exped. 24, 105 & 372, Beentje HJ et al. NMK Exped. 873 & 936, Drummond RB & Hemsley JH 4380, Medley KE 622, Joanna B 9026, Dale IR 3784, Mutangah JG & Nakamura E JKCAT 1599, Gilbert MG 7108 (EA).

# F107. MORACEAE

4 Genera, 22 species

- *Dorstenia brownii* Rendle Habit: Herb. Habitat: Evergreen forest, wet places, often among rocks, 1425–1850 m. Vouchers: SAJIT–005326 (EA, HIB), Faden RB et al. NMK Exped. 763, Faden RB et al. 70/224 & 552 (EA).
- EDorstenia christenhuszii M.W.Chase & M.F.Fay Habit: Herb. Habitat: Upland rainforest near streams, 1425–1850 m. Vouchers: Christenhusz MJM et al. 6664, Malombe & Matheka 1233, Kamau P 457, Matheka K & Miyawa D 841, Faden RB et al. NMK Exped. 765, Koen TW s.n. (EA).
- *Dorstenia goetzei* Engl. Habit: Herb. Habitat: Wet and dry forests on hill slopes among rocks, 800–1200 m. Vouchers: Kabuye CHS et al. NMK Exped. 669, Luke WRQ & Luke PA 5517, Luke WRQ et al. 6414 (EA). Near Threatened.
- *Dorstenia hildebrandtii* Engl. var. *hildebrandtii* Habit: Herb. Habitat: Forest, woodland, bushland near streams, 670–1000 m. Vouchers: SAJIT–005379 (EA, HIB), Faden RB, Evans A & Msafiri F 70/955, Sacleux C 2288 (EA).
- Dorstenia hildebrandtii Engl. var. schlechteri (Engl.) Hijman Habit: Herb. Habitat: Moist forest, along streams into woodland and thicket, 670–1550 m. Vouchers: Faden RB et al. 70/181 & 483, Faden RB & Faden AJ 74/500, Archer PG 310 (EA).
- NE **Dorstenia warneckei Engl.** Habit: Herb. Habitat: Forest, in shady, wet and rocky places, ca. 1500 m. Voucher: Wakanene KM & Mwangangi OM 678 (EA). Near Threatened.
- *Dorstenia zanzibarica* Oliv. Habit: Herb. Habitat: Forest on ground humus and rocks, deciduous bushland, 700–1554 m. Vouchers: Luke WRQ, Bytebier B, Pakia M 5326, Wakanene KM & Mwangangi OM 678, Faden RB, Evans A, Githui M 70/152, Archer PG 311 & 492, Gilbert MG 5828 (EA).
- *Ficus bubu* Warb. Habit: Tree. Habitat: Forest, montane woodland, riverine or ground water, disturbed places, ca. 905 m. Voucher: Medley KE 732 (EA).
- *Ficus exasperata* Vahl Habit: Tree. Habitat: Forest edges, rocky slopes, along rivers, disturbed areas, 1260–1380 m. Vouchers: Kabuye CHS et al. NMK Exped. 805, Bally PRO 8773 (EA).
- *Ficus glumosa* Delile Habit: Tree. Habitat: Rocky outcrops in wooded grasslands and deciduous bushlands, 650–1000 m. Vouchers: Medley KE 514, 555 & 813 (EA).
- *Ficus ingens* (Miq.) Miq. Habit: Tree. Habitat: Rock outcrops, stream sides, disturbed forests and wooded grasslands, 650–1000 m. Vouchers: Kabuye CHS 82/138, Kabuye et al. NMK Exped. 672, Mwachala G et al. EW924 & 3181, Medley KE 686 & 814 (EA).
- Ficus lutea Vahl Habit: Tree. Habitat: Forest, montane woodland, riverine, cleared lands, 650–1000 m. Voucher: Medley KE 833 (EA).

- *Ficus natalensis* Hochst. Habit: Tree. Habitat: Wet and dry forest, riverine forest, high rainfall woodland, 900–1500 m. Vouchers: Luke WRQ & Luke PA 4097, Wakanene KM & Mwangangi OM 348 (EA).
- *Ficus populifolia* Vahl Habit: Tree. Habitat: Riparian, rocky outcrops in deciduous bushland and wooded grassland, ca. 600–700 m. Vouchers: Polhill RM & Kibuwa SP 938, Hildebrandt JM 2842 (EA).
- *Ficus* sp. nr. *recurvata* De Wild. Habit: Tree. Habitat: Lowland forest, riverine and flood plains, 550–700 m. Voucher: Greenway PJ & Kanuri K 12703 (EA).
- *Ficus salicifolia* Vahl Habit: Tree. Habitat: Seasonal streams, rocky outcrops, 500–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 606, Ossent JR 119 (EA).
- Ficus sur Forssk. Habit: Tree. Habitat: Forest, riverine, wooded grassland, cleared places, 1000–1850 m. Vouchers: Watuma BM W0126 (EA, HIB), Kabuye CHS 82/139, Wakanene KM & Mwangangi OM 640, Faden RB et al. 71/217, Beentje HJ et al. NMK Exped. 1176, Raler I 0029, Medley KE 443, 628, 832 & 1008 (EA).
- *Ficus sycomorus* L. Habit: Tree. Habitat: Forest edges, riverine, montane woodland, 650–1000 m. Voucher: Medley KEM p.r. (EA).
- *Ficus thonningii* Blume Habit: Tree. Habitat: Forest, woodland, bushland, wooded grassland, 700–1875 m. Vouchers: Watuma BM W0120 (EA, HIB), Faden RB et al. NMK Exped. 15 & 337, Medley KE 885, Raler I 0054 (EA).
- (De Ficus tremula Warb. subsp. acuta Wild.) C.C.Berg Hab-Liana/Tree. Habitat: Upland rainforest, woodland, it: montane 650–1000 m. Vouchers: Medley KE 672 & 812 (EA).
- *Ficus wakefieldii* Hutch. Habit: Tree. Habitat: Riverine, grassland, rocky outcrops, ca. 1300 m. Voucher: Luke WRQ & Luke PA 5531 (EA).
- *Hijmania alta* (Engl.) M.D.M.Vianna Habit: Shrub. Habitat: Understorey in evergreen forest near streams, ca. 1180 m. Voucher: Mwachala G et al. EW282 (EA).
- *Milicia excelsa* (Welw.) C.C.Berg Habit: Tree. Habitat: Rainforest, riverine and ground water forest, ca. 600 m. Vouchers: Mrs. Robertson SA 4693, Fleuret A 5 (EA). Near Threatened.

#### F108. MORINGACEAE

1 Genus, 1 species

Moringa borziana Mattei – Habit: Subshrub. Habitat: Deciduous bushland on sandy soils, ca. 600 m. Voucher: Mrs. Robertson SA 7395 (EA).

## F109. MYRICACEAE

1 Genus, 2 species

*Myrica kilimandscharica* Engl. – Habit: Shrub/Tree. Habitat: Upland rainforest, mist forest, 998–2170 m. Vouchers: Mwachala G et al EW98 & 1260, Wakanene

- KM & Mwangangi OM 342 & 438, Faden RB et al. NMK Exped. 79 & 302, Gardner HM 2947, Bally PRO 8719 (EA).
- Myrica salicifolia Hochst. ex A.Rich. Habit: Shrub/Tree. Habitat: Upland rainforest, evergreen bushland, secondary thicket, 1400–2195 m. Vouchers: Rukunga G et al. 022/04, Medley KE 931, Christenhusz MJM et al. 6649 (EA).

## F110. MYRTACEAE

4 Genera, 10 species

- \**Eucalyptus camaldulensis* **Dehnh.** Habit: Tree. Habitat: Evergreen forest margins, ca. 1799 m. Voucher: Watuma BM W0287 (EA, HIB). Near Threatened.
- *Eugenia uniflora* L. Habit: Tree. Habitat: Upland evergreen forest slopes, ca. 1500 m. Voucher: SAJIT–004108 (EA, HIB).
- *Eugenia verdcourtii* Byng Habit: Shrub/Tree. Habitat: Dry evergreen forest and bushland, 900–1200 m. Vouchers: Luke WRQ et al. 5332, Faden RB, Evans A & Githui M 70/179 (EA).
- \*Psidium cattleyanum Sabine Habit: Tree. Habitat: Mist forest edge, near homesteads, 1564–1632 m. Vouchers: SAJIT–004593, Watuma BM W0215 (EA, HIB).
- \**Psidium guajava* L. Habit: Tree. Habitat: Mist forest edge, near homesteads, ca. 1577 m. Voucher: Watuma BM W0225 (EA, HIB).
- NE Syzygium micklethwaitii Verdc. Habit: Tree. Habitat: Mist forest, dry evergreen forest, rocky slopes, 1000–1900 m. Vouchers: Watuma BM W0141 (EA, HIB), Luke WRQ & Luke PA 4152, Kabuye CHS 82/126, Faden RB et al. NMK Exped. 335, Drummond RB & Hemsley JH 4360, & 1002, Bally PRO 8711, Medley KE 922 & 1014 (EA). Vulnerable.
- NE Syzygium subcordatum (Verdc.) Byng & N.Snow Habit: Tree. Habitat: Upland rainforest, 1400–1910 m. Vouchers: Mwachala G, Nyaboke B & Matheka K 1048, Faden RB, Evans A, Msafiri F & Smeenk C 71/17, Faden RB et al. NMK Exped. 386, Raler I 0053 (EA). Vulnerable.
- *Syzygium afromontanum* (**F.White**) **Byng** Habit: Tree. Habitat: Evergreen forest slopes, 1500–1600 m. Voucher: Dale IR 13529 (EA).
- Syzygium guineense (Willd.) DC. Habit: Tree. Habitat: Forest, riverine forest, Acacia-Combretum-Terminalia woodland, 950–1875 m. Vouchers: Mwachala G et al. EW2805, Medley KE 441, Faden RB et al. NMK Exped. 187, Raler I 0050 (EA).
- \*Syzygium jambos (L.) Alston Habit: Tree. Habitat: Cultivated, 1300–1500 m. Voucher: Kimuzi D 1 (EA).

#### F111. NYCTAGINACEAE

2 Genera, 7 species

Boerhavia coccinea Mill. – Habit: Herb. Habitat: Disturbed rocky ground in open bushland, waste places, roadsides, cultivated areas, 560–800 m. Vouchers: Wa-

- kanene KM & Mwangangi OM 707, Kuchar P, Msafiri F & Karime N 5689, Hucks M 709 (EA).
- **Boerhavia diffusa** L. Habit: Herb. Habitat: Disturbed ground in cultivation, waste places, grassland, along paths, ca. 750 m. Voucher: Goyder DJ, Masinde PS & Whitehouse C 4017 (EA).
- **Boerhavia erecta L.** Habit: Herb. Habitat: Roadsides in steep grassy slopes, alluvial soils, 556–750 m. Vouchers: Faden RB & Faden AJ 74/264, Goyder DJ, Masinde PS, Whitehouse C 4013, Bally B 13248, Ciba-Geigy 6, Hucks M 765, Napier ER 909, Belsky JB 367, Friis IB 98 (EA).
- Commicarpus grandiflorus (A.Rich.) Standl. Habit: Herb. Habitat: Grassland, open woodland and scrub, ca. 950 m. Vouchers: Luke WRQ & Luke PA 6446 (EA).
- Commicarpus helenae (Roem. & Schult.) Meikle Habit: Herb. Habitat: Commiphora-Sansevieria bushland and bushland thicket, ca. 600 m. Vouchers: Faden RB & Faden AJ 74/531, Hucks M 766, Belsky JB 637 (EA).
- Commicarpus pedunculosus (A.Rich.) Cufod. Habit: Herb. Habitat: Riverine in dry grassland, open bushland, scrub and rocky hillsides, ca. 800 m. Voucher: Wakanene KM & Mwangangi OM 712 (EA).
- Commicarpus plumbagineus (Cav.) Standl. Habit: Herb. Habitat: Dry bush, scrub and riverine forest, 579–860 m. Vouchers: Watuma BM W0168 (EA, HIB), Mwachala G et al. EW938, 938A & 979, Goyder DJ, Masinde PS & Whitehouse C 4018, Gardner HM 3002, Napier ER 1051 (EA).

#### F112. NYMPHAEACEAE

1 Genus, 1 species

*Nymphaea nouchali* Burm.f. var. *caerulea* (Savigny) Verdc. – Habit: Herb. Habitat: Swamps, seasonal ponds, ca. 1617 m. Voucher: Watuma BM W0302 (EA, HIB). Endangered.

## F113. OCHNACEAE

2 Genera, 7 species

- Campylospermum sacleuxii (Tiegh.) Farron Habit: Tree. Habitat: Evergreen forest, ground-water, semi-dry and riverine forest, ca. 1750 m. Voucher: Wakanene KM & Mwangangi OM 638 (EA).
- NE Campylospermum scheffleri (Engl. & Gilg) Farron Habit: Tree. Habitat: Evergreen forest, Ocotea-Podocarpus mist forest, 1425–1875 m. Vouchers: Watuma BM W0023 (EA, HIB), Luke WRQ et al. 5364, Christenhusz MJM et al. 6673, Faden RB et al. NMK Exped. 407, 571 & 758, Beentje HJ et al. NMK Exped. 952, Drummond RB & Hemsley JH 4342, Faden RB et al. 71/0183, Raler I 0105 (EA). Vulnerable.

- Ochna holstii Engl. Habit: Tree. Habitat: Rainforest, moist and dry upland evergreen forest, 1000–1875 m. Vouchers: Watuma BM W0279 (EA, HIB), Mwachala G et al. EW138, 181, 188 & 246, Wakanene KM & Mwangangi OM 461, Faden RB et al. NMK Exped. 250, Raler I 0020, Faden RB, Evans A & Smeenk C 71/151, Medley KE 554 & 881 (EA).
- Ochna inermis (Forssk.) Schweinf. Habit: Shrub. Habitat: Mixed bushland and scrub in rocky places, 500–750 m. Vouchers: Faden RB, Evans A, Rathbun B 69/422, Drummond, RB & Hemsley JH 4270, Ossent JR 140, Jex-Blake M 5705, Hucks M 462 (EA).
- Ochna insculpta Sleumer Habit: Shrub. Habitat: Evergreen forest, riverine forest, woodland at forest edge. Voucher: Joanna B 8903 (EA).
- Ochna atropurpurea DC. Habit: Shrub. Habitat: Mixed thicket and bushland, Vouchers: Luke WRQ & Festo L 2429, Fleuret A 16, Safary M 66 (EA).
- Ochna ovata F.Hoffm. Habit: Shrub. Habitat: Dry evergreen forest, Acacia-Commiphora woodland and bushland, 550–1400 m. Vouchers: Mwachala G et al. EW1278, Mungai GM et al. EW3285, Luke WRQ & Luke PA 5361, Drummond RB & Hemsley JH 4397 & 4411, Medley KE 499 (EA).

## F114. OLACACEAE

1 Genus, 1 species

Strombosia scheffleri Engl. – Habit: Tree. Habitat: Rainforest, 1000–1900 m. Vouchers: Drummond RB & Hemsley JH 4354, Raler I 0009, Medley KE 904, De Block P, Muasya, Stieperaere H & Bytebier B 315, Faden RB et al. NMK Exped. 233 (EA).

#### F115. OLEACEAE

4 Genera, 5 species

- Jasminum fluminense Vell. subsp. fluminense Habit: Shrub. Habitat: Forest, woodland, bushland and grassland, 550–1613 m. Vouchers: Watuma BM W0268 (EA, HIB), Kabuye CHS et al. NMK Exped. 741, Mwachala G et al. EW2803, Mungai GM et al. EW1655 & 2827, Drummond RB & Hemsley JH 4391, Medley KE 454 & 878, Hildebrandt HJ 2500 (EA).
- Jasminum streptopus E.Mey. Habit: Liana. Habitat: Forest margins, moist bushland and thicket, ca. 985 m. Voucher: Faden RB & Faden AJ 74/485 (EA).
- Noronhia mildbraedii (Gilg & G.Schellenb.) Hong-Wa & Besnard Habit: Tree. Habitat: Evergreen moist forest on basement complex, 1425–1850 m. Voucher: Faden RB et al. NMK Exped. 382 (EA).
- *Olea europaea* L. subsp. *cuspidata* (Wall. ex G.Don) Cif. Habit: Tree. Habitat: Evergreen woodland, upland rainforest, wooded grasslands, 650–1640 m. Vouchers: Kabuye CHS 82/44, Medley KE 617, 631 & 638 (EA).

Schrebera alata (Hochst.) Welw. – Habit: Tree. Habitat: Bushland and forest, 1000–1875 m. Vouchers: Mwachala G et al. EW3083/A, Faden RB et al. NMK Exped. 548, Hildebrandt JM 2532, Raler I 0121 (EA).

# F116. ONAGRACEAE

2 Genera, 4 species

- *Epilobium hirsutum* L. Habit: Herb. Habitat: Swampy and marshy areas by streams and rivers, ca. 1550 m. Voucher: Kabuye CHS 82/148 (EA).
- Ludwigia abyssinica A.Rich. Habit: Shrub. Habitat: Swampy ground by ditches and rivers, 1000–1372 m. Vouchers: Mwachala G et al. EW3553, Kabuye CHS 82/43 & 128, Luke WRQ et al. 5299, Mungai G et al. EW2813, Wakanene KM & Mwangangi OM 539 & 617, Faden RB, Evans A, Smeenk C 70/574 (EA).
- *Ludwigia jussiaeoides* Desr. Habit: Shrub. Habitat: Swampy and seasonally flooded places, streams, 823–1372 m. Vouchers: Kabuye CHS 82/29, Archer PG 559 (EA).
- *Ludwigia leptocarpa* (Nutt.) H.Hara Habit: Herb. Habitat: Swamp, ditches, along rivers, ca. 850 m. Vouchers: Mwachala G et al. EW760, Lubai lK HB10 (EA).

## F117. OPILIACEAE

1 Genus, 1 species

*Opilia amentacea* Roxb. – Habit: Liana. Habitat: *Acacia* woodland, along temporary streams, upland rainforest, 550–1875 m. Vouchers: Watuma BM W0175 (EA, HIB), Mwachala G et al. EW216, Medley KE 498, 567, 577, 608, 873, 890 & 981, Faden RB et al. NMK Exped. 559 (EA).

## F118. OROBANCHACEAE

7 Genera, 13 species

- Alectra sessiliflora (Vahl) Kuntze Habit: Herb. Habitat: Forest undergrowth, path sides and edges, montane grassland, 1400–2000 m. Vouchers: SAJIT–004570 & 005409 (EA, HIB), Drummond RB & Hemsley JH 4346, Beentje HJ et al. NMK Exped. 356, Faden RB et al. NMK Exped. 1003 (EA).
- *Alectra vogelii* Benth. Habit: Herb. Habitat: Cultivations, riverbanks and grasslands, 457–609 m. Voucher: Nattrass MS 796 (EA).
- Asepalum eriantherum (Vatke) Marais Habit: Shrub. Habitat: Commiphora woodland, deciduous bushland, 490–609 m. Vouchers: Muasya J GBK 004/025/2001, Dale IR 3647, Faden RB & Faden AJ 74/522, Hucks M 480, Ossent JR 137 (EA).
- Buttonia natalensis McKen ex Benth. Habit: Liana. Habitat: Dry rocky places in woodland and riverbanks, 579–690 m. Vouchers: Gillett JB 18740, Archer PG 449, Greenway PJ 9829 (EA).
- Cycnium herzfeldianum (Vatke) Engl. Habit: Herb. Habitat: Forest margins, wet grassland, 1000–1780 m. Vouchers: SAJIT–004107 (EA, HIB), Kabuye CHS 82/5, Mwachala G et al. EW625, 1193, 1356, 2814, 3075A, 3139, Wakanene

- KM & Mwangangi OM 749, Cheseny CMC 34/72, Friis I & Hansen OJ 2643, Ossent JR 91, Nappier ER 1101 (EA).
- Cycnium veronicifolium (Vatke) Engl. Habit: Herb. Habitat: Open hillsides, degraded forests, grassland, wooded grassland, 1740–2100 m. Vouchers: SA-JIT–004552 (EA, HIB), Gillett JB, Burtt BL, Osborn RM 17085, Bally PRO 13561, Beentje HJ et al. NMK Exped. 905, Uhlig C 5 (EA).
- NE Harveya kenyensis Hepper Habit: Herb. Habitat: Thickets and forests, shaded ground, 500–900 m. Vouchers: Muasya AM 2097 (EA), Leach LC & Bayliss B 10250 (EA).
- *Harveya obtusifolia* (Benth.) Vatke Habit: Herb. Habitat: Grass in thickets and bushland, ca. 950 m. Voucher: Mwachala G et al. EW1272 (EA).
- *Pseudosopubia hildebrandtii* (Vatke) Engl. Habit: Herb. Habitat: River margins, grassland with trees, ca. 620 m. Voucher: Gillett JB & Burtt BL 17180 (EA).
- Striga asiatica (L.) Kuntze Habit: Herb. Habitat: Woodland, plantation forest, cultivated lands, 1000–1600 m. Vouchers: Mwachala G et al. EW603, 995 & 1568, Mungai GM et al. EW3195, Beentje HJ et al. NMK Exped. 1140 (EA).
- Striga forbesii Benth. Habit: Herb. Habitat: Grassy areas with cracking clay soil, 1150–1600 m. Vouchers: Mwachala G et al. EW605, Beentje HJ et al. NMK Exped. 1137 (EA).
- Striga gesnerioides (Willd.) Vatke. Habit: Herb. Habitat: Grassland and cultivated grounds, 610–1050 m. Vouchers: SAJIT–005385 (EA, HIB), Polhill RM & Kibuwa SP 950, Joana B 8947, Gillett JB 17238 & 18741 (EA).
- Striga latericea Vatke Habit: Herb. Habitat: Seasonally wet grassland, cultivated lands, 600–900 m. Voucher: Joanna B & Opiko 8928 (EA).

#### F119. OXALIDACEAE

1 Genus, 2 species

- Oxalis corniculata L. Habit: Herb. Habitat: Weed in cultivation and disturbed areas, roadsides, 920–1000 m. Vouchers: Mwachala G et al. EW1351 & 1690 (EA).
- Oxalis debilis Kunth Habit: Herb. Habitat: Shaded cultivated places and waste places. Voucher: Kluguess LM 15 (EA).

#### F120. PAPAVERACEAE

1 Genus, 1 species

Fumaria abyssinica Hammar – Habit: Herb. Habitat: Glades in upland rainforest, weed of cultivations, ca. 1814 m. Voucher: SAJIT–006396 (EA, HIB).

# F121. PASSIFLORACEAE

3 Genera, 9 species

Adenia globosa Engl. – Habit: Liana. Habitat: Dry evergreen bushland, montane woodland, scrubland, 650–1000 m. Vouchers: Watuma BM W0186 (EA, HIB), Bally PRO 13406, Medley s.r. (EA).

- *Adenia cissampeloides* (**Planch. ex Hook.**) Harms Habit: Climber. Habitat: Forest, bushland, ca. 950–998 m. Vouchers: Mwachala G et al. EW49 & 845 (EA).
- Adenia keramanthus Harms Habit: Subshrub. Habitat: Deciduous woodland & bushland, 650–1000 m. Vouchers: Mwachala et al. EW3308, Ossent JR 98, Bally JB 13409, Medley KE 573 (EA).
- Adenia lanceolata Engl. subsp. scheffleri (Engl. & Harms) W.J. de Wilde Habit: Climber. Habitat: Deciduous bushland, 600–800 m. Voucher: Joanna B 9083 (EA).
- Adenia volkensii Harms Habit: Herb. Habitat: Grassland, deciduous bushland, ca. 1150 m. Voucher: Mwachala G et al. EW3189 (EA).
- Adenia wightiana (Wall. ex Wight & Arn.) Engl. subsp. africana W.J. de Wilde Habit: Herb. Habitat: Forest edges, deciduous bushland, 800–950 m. Vouchers: Kabuye CHS et al. NMK Exped. 727, Archer PG 14782 (EA).
- Basananthe hanningtoniana (Mast.) W.J. de Wilde Habit: Climber. Habitat: Open areas in forest and margins, deciduous bushland, 862–1801 m. Vouchers: SAJIT–004624, Watuma BM W0046 (EA, HIB), Luke PA & Luke WRQ 6458, Kabuye CHS et al. NMK Exped. 809, Faden RB & Faden AJ 74/455 (EA).
- Basananthe subsessilicarpa J.B. Gillett ex Verdc. Habit: Climber. Habitat: Open bushland, 950–1400 m. Vouchers: Mwachala G et al. EW961, Wakanene KM & Mwangangi OM 658, Bally 13291 (EA).
- \*Passiflora edulis Sims Habit: Climber. Habitat: Escaped in forest edges, thickets and disturbed places, 1500–1875 m. Voucher: Faden RB et al NMK Exped 479 (EA).

#### F122. PEDALIACEAE

1 Genus, 1 species

Sesamothamnus rivae Engl. – Habit: Shrub/Tree. Habitat: Acacia-Commiphora scrub, 550–1000 m. Vouchers: Medley KE 714 & 874, Dale IR 3877, Faden RB & Faden AJ 74/256 (EA).

#### F123. PENAEACEAE

1 Genus, 1 species

Olinia rochetiana A.Juss. – Habit: Shrub/Tree. Habitat: Disturbed upland dry and moist evergreen forest, forest edges, 1000–1640 m. Vouchers: Muasya J GBK 48007, Mwachala G s.n., Medley KE s.n. (EA).

## F124. PERACEAE

1 Genus, 1 species

Clutia abyssinica Jaub. & Spach var. usambarica Pax & K.Hoffm. – Habit: Shrub. Habitat: Open areas in evergreen forest, secondary associations, 1700–1950 m.

Vouchers: SAJIT–004535, Watuma BM W0068 (EA, HIB), Faden RB et al. NMK Exped. 318, Bally 8798, Mwachala G et al. EW1676, Christenhusz MJM, Kamau P, Mbale M, Chase MW & Kyaa J 6656, Medley KE 589, 625, 702 & 799 (EA).

# F125. PHYLLANTHACEAE

6 Genera, 11 species

- Antidesma venosum E.Mey. ex Tul. Habit: Tree. Habitat: Forest edges, open forest, deciduous woodland, ca. 1050 m. Voucher: Mungai GM et al. EW1750 (EA).
- *Bridelia cathartica* Bertol. Habit: Shrub. Habitat: Woodland, bushland, thicket, ca. 990 m. Voucher: Mwachala G et al. EW1570 (EA).
- *Bridelia micrantha* (Hochst.) Baill. Habit: Tree. Habitat: Edges of evergreen forest, bushland and thicket, 650–1206 m. Vouchers: Watuma BM W0014 (EA, HIB), Mwachala G et al. EW228, Kabuye CHS et al. NMK Exped. 668, Medley KE 692 & 829 (EA).
- Bridelia taitensis Vatke & Pax Habit: Shrub/Tree. Habitat: Upland and dry evergreen bushland, forest edges, deciduous bushland, 426–1200 m. Vouchers: SA-JIT–005361 & 005391 (EA, HIB), Mwachala G et al. EW527 & 1511, Kabuye CHS et al. NMK Exped. 647, Wakanene KM & Mwangangi OM 520, Kitaka W 35, Medley KE 418 & 582, Faden RB & Faden AJ 74/254, Greenway PJ & Kanuri K 12892, Hildebrandt JM 2415 (EA).
- *Flueggea virosa* (Roxb. ex Willd.) Voigt subsp. *virosa* Habit: Shrub. Habitat: Forest edges and associated bushland, 550–650 m. Vouchers: Medley KE 532 (EA).
- *Margaritaria discoidea* (Baill.) G.L.Webster var. *discoidea* Habit: Tree. Habitat: Upland moist forest, deciduous woodland, fringing forest, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 486 (EA).
- <sup>E</sup>Meineckia ovata (E.A.Bruce) J.F.Brunel Habit: Shrub. Habitat: Undergrowth in evergreen montane mist forest, 1372–1900 m. Vouchers: Watuma BM W0288 (EA, HIB), Kabuye CHS 82/74, Faden RB et al. NMK Exped. 524, Faden RB & Faden AJ et al. 71/204, De Block P et al. 288 & 290, Gardner HM 2909, Raler I 0068 (EA). Vulnerable.
- *Phyllanthus leucanthus* Pax Habit: Herb. Habitat: Forest edges, deciduous woodland and bushland, rocky and ruderal sites, ca. 500–700 m. Voucher: Leuthhold W 57 (EA).
- *Phyllanthus maderaspatensis* L. Habit: Herb. Habitat: Deciduous woodland, bushland, edges of wet areas, 1040–1100 m. Voucher: Mwachala G et al. EW234 (EA).
- NE Phyllanthus mittenianus Hutch. Habit: Shrub. Habitat: Evergreen forest, often in rocky places, riverine, 650–1480 m. Vouchers: Kabuye CHS et al. NMK Exped. 676, Mwachala G et al. EW1681 & 2561, Kamau P et al. EW3231, Luke WRQ et al. 5366, Mungai GM et al. EW1337, Gilbert MG & Gilbert CI 6101, Napier ER 1092 (EA).
- *Phyllanthus sepialis* Müll.Arg. Habit: Shrub. Habitat: Forest margins and pathways, upland bushland, along rivers in drier areas, 800–1573 m. Vouchers: Watuma BM

W0211 (EA, HIB), Kabuye CHS et al. NMK Exped. 734, Mbale M, Muthoka P, Chesire C & Hay F NMK 957 (EA).

## F126. PHYTOLACCACEAE

1 Genus, 1 species

*Phytolacca dodecandra* L'Herit. – Habit: Shrub. Habitat: Forest, woodland, bushland and thicket, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 343, Bally PRO 8760 (EA).

## F127. PIPERACEAE

2 Genera, 8 species

- *Peperomia abyssinica* Miq. Habit: Herb. Habitat: Intermediate and montane forests, rocky places, 1525–2205 m. Vouchers: SAJIT–006391 (EA, HIB), Wakanene KM, Mwangangi OM & Dunn B 369, Christenhusz MJM et al. 6667, Faden RB et al. NMK Exped. 82 & 226, Faden RB & Faden AJ 72/253, Faden RB & Githui M 70/710 (EA).
- Peperomia blanda (Jacq.) Kunth Habit: Herb. Habitat: Evergreen scrub, dry forest, bare and shady rocky places, 1050–1750 m. Vouchers: Wakanene KM & Mwangangi OM 584, Mungai GM et al. EW1753 (EA).
- Peperomia bangroana C.DC. Habit: Herb. Habitat: Mossy tree trunks in upland forest and rainforest, 1400–1750 m. Vouchers: Bytebier B 1739, Faden RB & Faden AJ 72/264 (EA).
- *Peperomia leptostachya* Hook. & Arn. Habit: Herb. Habitat: Mist forest, moist thicket, cliff faces, 800–985 m Vouchers: Kabuye CHS et al. NMK Exped. 655, Faden RB, Evans A & Githui M 70/160, Faden RB & Faden AJ 74/498 (EA).
- Peperomia retusa (L.f.) A.Dietr. Habit: Herb. Habitat: Mossy banks in mist and rainforest, rocky places in streams, 1000–1875 m. Vouchers: Luke WRQ & Luke PA 4201, Wakanene KM & Mwangangi OM 257, Christenhusz MJM et al. 6622, Faden RB et al. NMK Exped. 218, Faden RB et al. 71/169, Gillett JB, Burt BL & Osborn RM 17149 (EA).
- Peperomia tetraphylla (G.Forst.) Hook. & Arn. Habit: Herb. Habitat: Mist forests, drier evergreen forests, semi-evergreen bushland, 1250–1875 m. Vouchers: Kabuye CHS 82/47, Faden RB et al. NMK Exped. 246, Faden RB et al. 70/711 & 71/139 (EA).
- Piper capense L.f. Habit: Shrub. Habitat: Moist forest undergrowth, 1150–2170 m. Vouchers: SAJIT–005332, Watuma BM W0055 (EA, HIB), Mwachala G et al. EW108, Wakanene KM & Mwangangi OM 221, 368 & 467, Muchele WN HB25/94, Drummond RB & Hemsley JH 4377, Faden RB et al. NMK Exped. 77 & 215, Raler I 0032, Christenhusz MJM et al. 6629, Medley KE 439, Faden RB et al. 71/985, Bally PRO 8764 & 13607, Murray High School 31 (EA).

*Piper umbellatum* L. – Habit: Shrub. Habitat: Evergreen forest undergrowth, riverbanks, 1350–1800 m. Vouchers: Luke WRQ & Luke PA 4140, Christenhusz MJM, Chase MW, Kamau P Mbale M & Kyaa J 6663 (EA).

# F128. PITTOSPORACEAE

1 Genus, 1 species

*Pittosporum viridiflorum* Sims – Habit: Shrub/Tree. Habitat: Upland rainforest, riverine forest, 900–1370 m. Vouchers: Mwachala G et al. EW249, 577, 788 & 915, Kabuye CHS 82/10, Wakanene KM & Mwangangi OM 433, Gardner HM 2929 (EA).

# F129. PLANTAGINACEAE

2 Genera, 3 species

- *Misopates orontium* (L.) Raf. Habit: Herb. Habitat: Weed of cultivations, sandy soils, open grassy places, roadsides, 2000–2100 m. Voucher: Drummond RB & Hemsley JH 4296 (EA).
- Veronica abyssinica Fresen. Habit: Herb. Habitat: Montane forest, stream banks, 1560–2170 m. Vouchers: SAJIT–006406 (EA, HIB), Faden RB et al. NMK Exped. 109, Gillett JB, Burtt BL & Osborn RM 17071 (EA).
- Veronica javanica Blume Habit: Herb. Habitat: Damp grasses, ditches, cultivations, near homesteads, 1000–1100 m. Voucher: Drummond RB & Hemsley JH 4400 (EA).

#### F130. PLUMBAGINACEAE

1 Genus, 1 species

Plumbago zeylanica L. – Habit: Subshrub. Habitat: Deciduous woodland, grassland and scrub, often by rivers, 800–1000 m. Vouchers: Kabuye CHS et al. NMK Exped. 607, Mwachala G et al. EW929, Drummond RB & Hemsley JH 4406 (EA).

## F131. POLYGALACEAE

1 Genus, 8 species

- **Polygala amboniensis** Gürke Habit: Herb. Habitat: Bushland, secondary grassland, cultivated grounds, 575–625 m. Vouchers: Hucks M 798, Gillett JB & Burtt BL 17186 (EA).
- *Polygala ehlersii* Gürke Habit: Herb. Habitat: Forest clearings and forest margins, dry open places, ca. 2100 m. Voucher: Gillett JB, Burtt BL & Osborn RM 17081 (EA).

- *Polygala erioptera* DC. Habit: Herb. Habitat: Open bushland, woodland and grassland, rocky ground, 950–1000 m. Voucher: Mwachala G et al. EW320 (EA).
- *Polygala kilimandjarica* Chodat Habit: Herb. Habitat: *Acacia-Commiphora* bushland, wooded and bushed grassland, ca. 610 m. Vouchers: Napier ER 2272, Johnstone 1884 (EA).
- *Polygala muratii* Jacq.-Fél. Habit: Herb. Habitat: Rocky slopes along gullies, thin soil over rock, 600–700 m. Voucher: Verdcourt B & Polhill RM 2711 (EA).
- *Polygala petitiana* A.Rich. Habit: Herb. Habitat: Woodland and grassland, 1040–1350 m. Vouchers: Mwachala G et al. EW371 & 2664 (EA).
- *Polygala senensis* Klotzsch Habit: Herb. Habitat: Scattered tree grassland, grassland, 1350–1550 m. Vouchers: Kabuye CHS 82/98 & 140 (EA).
- Polygala sphenoptera Fresen. Habit: Herb. Habitat: Evergreen bushland, wooded grassland, grassland, 800–2170 m. Vouchers: SAJIT–006364, Watuma BM W0157 (EA, HIB), Kabuye CHS et al. NMK Exped. 749, Mwachala G et al. EW99, 119, 621, 958 & 3244, Wakanene KM & Mwangangi OM 531, Faden RB et al. NMK Exped. 116, Beentje HJ et al. NMK Exped. 1142, Gillett JB, Burtt BL & Osborn RM 17081, Gilbert MG 5825 & 6105, Joanna B 8818, Ossent JR 89 (EA).

## F132. POLYGONACEAE

3 Genera, 8 species

- Oxygonum salicifolium Dammer Habit: Herb. Habitat: Grassland and disturbed ground, 800–1371 m. Vouchers: Mwachala G et al. EW1310 & 1344, Kabuye CHS 82/24, Kabuye CHS et al. NMK Exped. 662 (EA).
- Oxygonum sinuatum (Hochst. & Steud. ex Meisn.) Dammer Habit: Herb. Habitat: Cultivated and other ground suited to weed growth, 575–625 m. Vouchers: Hucks M 987, Kuchar P, Msafiri F & Karime N 5699 (EA).
- Oxygonum stuhlmannii Dammer Habit: Herb. Habitat: Cultivated or disturbed ground, 600–762 m. Vouchers: Jeffery GW 714, Hucks M 774 & 775 (EA).
- Persicaria decipiens (R.Br.) K.L.Wilson Habit: Herb. Habitat: Damp places, often growing in water, 800–1371 m. Vouchers: Mwachala G et al. EW1344, 1693 & 2565, Kabuye CHS 82/24, Kabuye CHS et al. NMK Exped. 662, Mungai GM et al. EW1310 & 2832 (EA).
- *Persicaria senegalensis* (Meisn.) Soják Habit: Herb. Habitat: By riversides, damp places, growing in water, 800–1650 m. Vouchers: SAJIT–005359 (EA, HIB), Kabuye CHS 82/54, Mwachala G et al. EW1692, Jeffrey C K813, Lubai IK HB12 (EA).
- *Persicaria strigosa* (R.Br.) H.Gross Habit: Herb. Habitat: Riverbanks, wet places, ca. 1200 m. Voucher: Wakanene KM & Mwangangi OM 500 (EA).
- Rumex abyssinicus Jacq. Habit: Herb. Habitat: Margins of upland rainforest, secondary bushland, abandoned cultivations, 1323–1817 m. Vouchers: Watuma BM W0102 & W0251 (EA, HIB).

Rumex usambarensis (Dammer) Dammer – Habit: Herb. Habitat: Open mist-forest, grassland, bushland, exposed rocky slopes, 1400–1900 m. Vouchers: SA-JIT–004547 (EA, HIB), Wakanene KM & Mwangangi OM 242 (EA).

## F133. PORTULACACEAE

1 Genera, 5 species

- *Portulaca grandis* Peter Habit: Herb. Habitat: Deciduous bushland, rocky outcrops, 875–1400 m. Vouchers: Watuma BM W0193 (EA, HIB), Gilbert MG 5822, Bally PRO 13403 (EA).
- *Portulaca kermesina* N.E.Br. Habit: Herb. Habitat: Open bushland, rock crevices, 600–1300 m. Vouchers: Kiambati M 49, Verdcourt B & Polhill RM 2707, Faden RB, Evans A & Rathbun G 69/408 (EA).
- Portulaca oleracea L. Habit: Herb. Habitat: Bushland, disturbed places, cultivated areas, 550–610 m. Vouchers: Napier ER 921 & 1046, Hucks M 595 (EA).
- *Portulaca quadrifida* L. Habit: Herb. Habitat: Bare patches among rocks, disturbed places, weed of cultivation, 600–1027 m. Vouchers: Watuma BM W0313 (EA, HIB), Mwachala G et al. EW3317, Hucks M 757 (EA).
- *Portulaca wightiana* Wall. ex Wight & Arn. Habit: Herb. Habitat: Rocky outcrop, sandy soils, 590–700 m. Voucher: Faden RB, Evans A & Rathbun G 69/407 (EA).

## F134. PRIMULACEAE

4 Genera, 5 species

- Ardisiandra wettsteinii J.Wagner Habit: Herb. Habitat: Upland rainforest and evergreen bushland on roadsides and pathsides, 1400–2200 m. Vouchers: SA-JIT–006367 (EA, HIB), Drummond & Hemsley 4284, Faden RB et al. NMK Exped. 47 & 146, Beentje HJ et al. NMK Exped. 908, Friis I & Hansen OJ 2674, Gillett JB et al. 17078, Verdcourt B & Polhill 2729, Christenhusz MJM et al. 6653 (EA).
- *Embelia schimperi* Vatke Habit: Liana. Habitat: Rainforest, forest edge, upland evergreen bushland, 1170–1400 m. Vouchers: Mwachala G et al. EW196 & 3206 (EA).
- Maesa lanceolata Forssk. Habit: Tree. Habitat: Forest edges, secondary and riverine forest, 1400–2170 m. Vouchers: SAJIT–006389, Watuma BM W0041 & W0074 (EA, HIB), Wakanene KM & Mwangangi OM 216 & 663, Faden RB et al. NMK Exped. 50, 113 & 325, Beentje HJ et al. NMK Exped. 842 & 917, Medley KE 978, Raler I 0003, Joanna B 8784, Greenway PG 14671, Sanganyi SKS 1 (EA).
- Myrsine africana L. Habit: Shrub. Habitat: Upland forest edges, 1400–2137 m. Vouchers: Beentje HJ 2135, De Block P et al. 303 & 308, Faden RB et al. NMK Exped. 87 & 299, Drummond RB & Hemsley JH 4290, Medley KE 1000, Bally PRO 8756 (EA).
- Myrsine melanophloeos (L.) R.Br. ex Sweet Habit: Tree. Habitat: Upland forest, open woodland, scrub near streams, 1225–1923 m. Vouchers: SAJIT–006352

(EA, HIB), Watuma BM W0085 (EA, HIB), Wakanene KM & Mwangangi OM 283 & 441, Faden RB et al. NMK Exped. 208, Beentje HJ et al. NMK Exped. 1172, Faden RB et al. 70/575, 744 & 71/1026, Seki T et al. JKCAT 1583, Dale IR 1133, Mwachala G s.n., Medley KE s.n. (EA).

# F135. PROTEACEAE

3 Genera, 3 species

- Faurea saligna Harv. Habit: Tree. Habitat: Woodland, grassland with scattered trees, 1080–1200 m. Vouchers: Mwachala G et al. EW584 & 811, Mungai GM et al. EW1439 & 3577 (EA).
- \*Grevillea robusta A.Cunn. ex R.Br. Habit: Tree. Habitat: Woodland, grown in settlements, 650–1000 m. Voucher: Medley KEM s.r. (EA).
- *Protea gaguedi* J.F.Gmel. Habit: Tree. Habitat: Woodland, exposed rocky places, ca. 1200 m. Voucher: Mungai GM et al. 1439 (EA).

# F136. PUTRANJIVACEAE

1 Genus, 1 species

*Drypetes gerrardii* Hutch. var. *gerrardii* – Habit: Tree. Habitat: Upland dry evergreen forest, riverine, 883–1875 m. Vouchers: Watuma BM W0188 (EA, HIB), Christenhusz MJM & Kamau P et al. 6634, Faden RB et al. NMK Exped. 326, Beentje HJ et al. NMK Exped. 1070, Medley KE 669, 696 & 1010, Raler I 0067 (EA).

## F137. RANUNCULACEAE

1 Genus, 2 species

- Clematis brachiata Thunb. Habit: Climber. Habitat: Forest edges and clearings, 1120–1900 m. Vouchers: Mwachala G et al. EW1699 & 3129, Wakanene KM & Mwangangi OM 551, 644 & 727, Faden RB et al. NMK Exped. 239, 365 & 1047, Raler I 0137, De Block P, Muasya, Stieperaere H & Bytebier 283 & 319 (EA).
- Clematis simensis Fresen. Habit: Liana. Habitat: Forest edge and bushland, 1300–1848 m. Voucher: SAJIT–005354, Watuma BM W0086 (EA, HIB).

### F138. RHAMNACEAE

6 Genera, 10 species

*Berchemia discolor* (Klotzsch) Hemsl. – Habit: Tree. Habitat: Montane woodland, thicket, semi-desert grassland, wooded grassland, 500–1000 m. Vouchers: Dale IR 3676, Medley KE 449 & 705 (EA).

- Gouania longispicata Engl. Habit: Liana. Habitat: Forest margins and disturbed areas, riverine thickets and wooded grasslands, 1500–2170 m. Vouchers: SA-JIT–004568 (EA, HIB), Faden RB et al. NMK Exped. 80 & 1063, Gardner HM 2979 (EA).
- Helinus integrifolius (Lam.) Kuntze Habit: Liana. Habitat: Thickets in wooded grassland, forest margins, 600–750 m. Vouchers: Faden RB & Faden AJ 74/262, Mrs. Robertson SA 6531, Greenway PJ & Kanuri K 12816, Dale IR 2046 (EA).
- *Helinus mystacinus* (Aiton) E.Mey. ex Steud. Habit: Liana. Habitat: Forest margins, secondary bushland, wooded grassland, 650–1000 m. Vouchers: SAJIT–005383, Watuma BM W0167 (EA, HIB), Medley KE 826 (EA).
- *Maesopsis eminii* Engl. Habit: Tree. Habitat: Rainforest, riverine forest, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 507, Raler I 0082 (EA).
- Scutia myrtina (Burm.f.) Kurz Habit: Shrub. Habitat: Forest margins, montane woodland, bushland, 650–1100 m. Vouchers: Mwachala G et al. EW378, Medley KE 792 (EA).
- Ziziphus abyssinica Hochst. Habit: Shrub/Tree. Habitat: Scattered tree grassland, bushland, 670–900 m. Vouchers: Medley KE 963, Johnston HH (EA).
- **Ziziphus mauritiana Lam.** Habit: Shrub/Tree. Habitat: Woodland, bushland, disturbed areas near settlements, along roads, 650–1000 m. Voucher: Medley KE 528 (EA).
- **Ziziphus mucronata Willd.** Habit: Tree. Habitat: *Acacia-Terminalia* woodland and bushland, 650–1000 m. Vouchers: Medley KE 414, 417 & 893, Bally PRO 8641 (EA).
- **Ziziphus pubescens Oliv.** Habit: Shrub/Tree. Habitat: Riverine, deciduous woodland and bushland, 640–1372 m. Vouchers: Kabuye CHS et al. NMK Exped. 610, Joanna B & Opiko 8869, Medley KE 836 & 1029 (EA).

## F139. RHIZOPHORACEAE

1 Genus, 4 species

- Cassipourea celastroides Alston Habit: Shrub/Tree. Habitat: Montane woodland, on rocky hillsides, 610–1200 m. Vouchers: Mwachala G et al. EW3330, Luke WRQ et al. 5519 & 6418, Medley KE 852 & 886, Faden RB et al. 69/415, Faden RB & Faden AJ 74/469, Gillett JB 19567 & 19573, Hildebrandt JM 2465 (EA).
- Cassipourea gummiflua Tul. Habit: Tree. Habitat: Upland forest, 1100–1200 m. Vouchers: Luke WRQ & Bytebier B et al. 5324, Medley KE 624 & 665 (EA).
- Cassipourea malosana (Baker) Alston Habit: Shrub/Tree. Habitat: Dry upland forest, under canopy of moist forest, 1350–1500 m. Voucher: Mwachala G et al. EW310 (EA).
- Cassipourea rotundifolia (Engl.) Alston Habit: Tree. Habitat: Dry evergreen mist forest, 900–1000 m. Vouchers: Faden RB, Evans A & Githui M 70/175, Archer PG 14346 (EA).

# F140. ROSACEAE

2 Genera, 6 species

- *Prunus africana* (Hook.f.) Kalkman Habit: Tree. Habitat: Upland rainforest, forest edge, riverine forest, 1250–2000 m. Vouchers: SAJIT–004566 & 004596, Watuma BM W0307 (EA, HIB), Mwachala G et al. EW2577, Faden RB et al. NMK Exped. 306, Beentje HJ et al. NMK Exped. 838 & 918 (EA). Vulnerable.
- \*Rubus niveus Thunb. Habit: Shrub. Habitat: Disturbed areas in woodland and scrub, 1700–1850 m. Vouchers: SAJIT–006404, Watuma BM W0098 (EA, HIB).
- *Rubus pinnatus* Willd. Habit: Shrub. Habitat: Edges of upland rain-forest, clearings in forests by streams, secondary moist forests, 1220–1850 m. Vouchers: Faden RB et al. NMK Exped. 403, Napier ER 1116, Raler I 0101 (EA).
- \*Rubus rosifolius Sm. Habit: Shrub. Habitat: Upland rainforest edges, secondary bushlands and abandoned cultivations, 1576–1875 m. Vouchers: Watuma BM W0099 (EA, HIB), Faden RB et al. NMK Exped. 347, Gillett JB, Burtt BL & Osborn RM 17065 (EA).
- Rubus scheffleri Engl. Habit: Shrub. Habitat: Upland rainforest margins and evergreen bushland, ca. 2211 m. Voucher: SAJIT–006375 (EA, HIB).
- Rubus steudneri Schweinf. var. dictyophyllus (Oliv.) R.A.Graham Habit: Shrub. Habitat: Edges and clearings in upland rainforest, upland evergreen bushland, 1800–2200 m. Voucher: Mwachala G et al. EW1723 (EA).

## F141. RUBIACEAE

41 Genera, 75 species

- Anthospermum herbaceum L.f. Habit: Herb. Habitat: Forest edges, woodland, road-side weed, 1800–2170 m. Vouchers: Faden RB et al. NMK Exped. 136, Drummond RB & Hemsley JH 4302, Gillett JB 17260, Lewis WH 5932 & 5937 (EA).
- Breonadia salicina (Vahl) Hepper & J.R.I.Wood Habit: Tree. Habitat: Gallery forest by rivers & streams, 1372–1500 m. Vouchers: Kabuye CHS 82/36, Raler I 0138, Bally PRO 8579 (EA).
- Bullockia dyscritos (Bullock) Razafim., Lantz & B.Bremer Habit: Shrub. Habitat: Rocky area, roadside banks, grazed areas, 762–1330 m. Vouchers: Mwachala G et al. EW3252, Gilbert MG & Gilbert CI 6102, Gardner HM 3000 (EA).
- Bullockia mombazensis (Baill.) Razafim., Lantz & B.Bremer Habit: Shrub. Habitat: Wooded grassland to forest, bushland, 650–1000 m. Vouchers: Faden RB, Evans A & Githui M 70/176, Medley KE 506, 899 & 986 (EA).
- *Canthium oligocarpum* Hiern subsp. *friesiorum* (Robyns) Bridson Habit: Tree. Habitat: Mist forest, 1600–1640 m. Voucher: Faden RB & Evans A 71/181 (EA).
- Canthium oligocarpum Hiern subsp. intermedium Bridson Habit: Shrub/Tree. Habitat: Mist forest understorey & margins, 1700–1875 m. Vouchers: Wakanene KM, Mwangangi OM, Dunn B 367, Faden RB et al. NMK Exped. 253, Faden RB et al. 71/1009 (EA). Vulnerable.

- Canthium oligocarpum Hiern subsp. oligocarpum Habit: Shrub. Habitat: Forest, 1540–1900 m. Vouchers: De Block P, Muasya AM, Stieperaere H & Bytebier B 276, 478 & 479 (EA).
- Catunaregam nilotica (Stapf) Tirveng. Habit: Shrub/Tree. Habitat: Montane woodland, riverine bushland, thicket edges, 650–1000 m. Vouchers: Kabuye CHS et al. NMK Exped. 739, Medley KE 760, 889 & 1003 (EA).
- Chamaepentas hindsioides (K.Schum.) Kårehed & B.Bremer var. glabrescens (Verdc.) Kårehed & B.Bremer Habit: Shrub. Habitat: Mist forest, ca. 1480 m. Voucher: Luke WRQ, Bytebier B & Pakia M 5359 (EA).
- Chamaepentas hindsioides (K.Schum.) Kårehed & B.Bremer var. hindsioides Habit: Subshrub. Habitat: Upland forests margins & bushlands, 1425–1981 m. Vouchers: Watuma BM W0039 (EA, HIB), Luke WRQ et al. 4196, De Block P, Muasya, Stieperaere H & Bytebier B 301A, 334, 363 & 366, Faden RB et al. NMK Exped. 254, Beentje HJ et al. NMK Exped. 906 & 1009, Gillett JB, Burtt BL & Osborn RM 17151, Gillett JB 18770, Dale IR 3813, Bally J 13573 & 13596, Hemp s.n. (EA).
- EChassalia discolor K.Schum. subsp. taitensis Verdc. Habit: Shrub. Habitat: Understorey in rainforest, 1450–1900 m. Vouchers: SAJIT–004603, 006342 & 006343, Watuma BM W0057 (EA, HIB), Wakanene KM & Mwangangi OM 276, Luke WRQ et al. 5490, Christenhusz MJM et al. 6638, De Block P, Muasya, Stieperaere H & Bytebier B 277 & 326, Faden RB et al. NMK Exped. 189, Bytebier B 1199, Hemp A 5253, Dale IR 3837 (EA).
- Chassalia parvifolia K.Schum. Habit: Shrub. Habitat: Evergreen forest, 1350–1900 m. Vouchers: SAJIT–006344 (EA, HIB), Luke WRQ, Bytebier B & Pakia M 5350, Faden RB et al. NMK Exped. 561, Beentje HJ et al. NMK Exped. 882B & 1071, De Block P, Muasya, Stieperaere H & Bytebier B 251 & 471, Drummond RB & Hemsley JH 4332 (EA).
- NE Coffea fadenii Bridson Habit: Tree. Habitat: Mist forest, 1400–1850 m. Vouchers: Wakanene KM & Mwangangi OM 462 & 651, Faden RB et al. NMK Exped. 342 & 404, Faden RB & Faden AJ 72/269, Faden RB, Evans A, Msafiri F & Smeenk C et al. 71/56, Faden RB & Githui M 70/743, Faden RB et al. 70/559, Raler I 0034 & 0039, Goodrich J EAH 17158 (EA). Endangered.
- Coffea sessiliflora Bridson subsp. sessiliflora Habit: Shrub. Habitat: Moist and dry evergreen forest, 1080–1370 m. Vouchers: Watuma BM W0295 (EA, HIB), Mwachala G et al. EW3178, Luke WRQ et al. 5532 (EA).
- Coffea zanguebariae Lour. Habit: Shrub. Habitat: Riverine, ca. 800 m. Voucher: Mwachala G et al. EW3333 (EA). Vulnerable.
- Coptosperma graveolens (S.Moore) Degreef var. graveolens Habit: Shrub/Tree. Habitat: Montane woodland, evergreen bushland and thicket, 600–1000 m. Vouchers: SAJIT–005362 (EA, HIB), Kabuye CHS et al. NMK Exped. 619, Medley KE 529, 546, 571, 715 & 736, Gilbert MG & Gilbert CI 6115 (EA).
- Cordylostigma prolixipes (S.Moore) Groeninckx & Dessein Habit: Herb. Habitat: Rocky areas, Euphorbia-Croton deciduous bushland, 1000–1067 m. Vouchers: Faden RB & Evans A 71/43, Bally PRO 8715 (EA).

- Cremaspora triflora (Thonn.) K.Schum. subsp. confluens (K.Schum.) Verdc. Habit: Shrub/Tree. Habitat: Swamp forest, plantation forest, thicket, ca. 1225 m. Voucher: Beentje HJ et al. NMK Exped. 1173 (EA, NMNH, WAG).
- Cremaspora triflora (Thonn.) K.Schum. subsp. triflora Habit: Shrub/Tree. Habitat: Understorey in evergreen and riverine forest, 1200–1640 m. Vouchers: Kabuye CHS et al. NMK Exped. 803, Faden RB et al. 70/444, Medley KE 604, Aver'yanov L 200 (EA).
- Dirichletia glaucescens Hiern Habit: Shrub/Tree. Habitat: Deciduous woodland, bushland and thicket, rocky outcrops, 450–1000 m. Vouchers: Medley KE 491 & 707, Faden RB & Faden AJ 74/530, Verdcourt B 5312 (EA), Ossent JR 134, Hildebrandt JM 2595, Lavranos JJ 11896, Gillett JB & Burtt BL 17170, Hooper SS & Townsend CC 1258, Belsky JB 492 (EA).
- Empogona ovalifolia (Hiern) Tosh & Robbr. var. glabrata (Oliv.) Tosh & Robbr. Habit: Shrub. Habitat: Evergreen forest, dry thickets and wooded grassland, 960–1875 m. Vouchers: SAJIT–004636 & 005377 (EA, HIB), Wakanene KM & Mwangangi OM 522, Luke WRQ et al. 6419, Faden RB et al. NMK Exped. 523 & 1180, Faden RB & Faden AJ 74/480, Gillett JB 19571, Archer PG 14344, Joanna B 8882 (EA). Vulnerable.
- *Empogona ovalifolia* (Hiern) Tosh & Robbr. var. *ovalifolia* Habit: Shrub. Habitat: Evergreen forest, montane woodland, secondary vegetation, 650–1000 m. Vouchers: Mwachala G et al. EW86, Medley KE 470, 601, 783, 809 & 903 (EA).
- *Empogona ovalifolia* (Hiern) Tosh & Robbr. var. *taylorii* (S.Moore) Tosh & Robbr. Habit: Shrub. Habitat: Dry forest, bushland with scattered trees, thicket, ca. 800 m. Voucher: Kabuye CHS 82/94 (EA). Vulnerable.
- Galiniera saxifraga (Hochst.) Bridson Habit: Tree. Habitat: Forest, 1740–2170 m. Vouchers: Faden RB et al. NMK Exped. 150, Beentje HJ et al. NMK Exped. 919 (EA).
- NE Galium brenanii Ehrend. & Verdc. Habit: Herb. Habitat: Heavily disturbed evergreen forest, 1900–2205 m. Vouchers: Verdcourt B & Polhill RM 2732(S), Faden RB & Faden AJ 72/248, Faden RB et al. NMK Exped. 94 (EA).
- *Galium spurium* L. subsp. *africanum* Verdc. Habit: Herb. Habitat: Cultivations, forest edges, bushlands and roadsides, 1400–1640 m. Voucher: Faden RB et al. NMK Exped. 10 (EA).
- Gardenia volkensii K.Schum. subsp. volkensii Habit: Tree. Habitat: Montane woodland, grassland with scattered trees, 487–1000 m. Vouchers: Medley KE 870, Greenway PJ & Kanuri K 13026 (EA).
- *Heinsenia diervilleoides* K.Schum. Habit: Shrub/Tree. Habitat: Rainforest, moist evergreen forest, 1500–1875 m. Vouchers: Faden RB et al. NMK Exped. 209, Faden RB et al. 71/982 (EA).
- *Heinsia crinita* (Wennberg) G.Taylor subsp. *parviflora* (K.Schum. & K.Krause) Verdc. Habit: Shrub. Habitat: Bushland, 550–650 m. Voucher: Medley KEM 961 (EA).
- *Hymenodictyon parvifolium* Oliv. subsp. *parvifolium* Habit: Shrub. Habitat: Acacia-Combretum thicket, mixed bushland, rocky outcrops, 610–1000 m. Vouchers:

- SAJIT–005365, Watuma BM W0181 (EA, HIB), Medley KEM 537, 560 & 703, Sacleux C 2298, Dale IR 3761, Greenway PJ & Kanuri K 12680 (EA)
- *Hymenodictyon parvifolium* Oliv. subsp. *scabrum* (Stapf) Verdc. Habit: Shrub. Habitat: Open woodland, thicket, rocky hills, ca. 520 m. Voucher: Faden RB & Faden AJ 74/247 (EA).
- *Keetia gueinzii* (Sond.) Bridson Habit: Liana/Shrub/Tree. Habitat: Forest and woodland, often on swampy ground, 1400–1900 m. Vouchers: SAJIT–004602 & 005321, Watuma BM W0240 (EA, HIB), Faden RB et al. NMK Exped. 385, Beentje HJ et al. NMK Exped. 843, De Block P, Muasya, Stieperaere H & Bytebier B 305, 324, 325, 333 & 472, Faden RB, Faden AJ & Smeenk C 71/1014, Raler I 0059 (EA).
- Lasianthus kilimandscharicus K.Schum. subsp. glabrescens Jannerup Habit: Shrub/Tree. Habitat: Montane forest, often by streams, forest edge clearings and secondary vegetation, 1425–1850 m. Vouchers: Beentje HJ et al. NMK Exped. 955, Faden RB, Faden AJ, Smeenk C, Smeenk N & McNee J et al. 71/983 (EA).
- Lasianthus kilimandscharicus K.Schum. subsp. hirsutus Jannerup Habit: Shrub/ Tree. Habitat: Upland evergreen forest, 1040–1660 m. Vouchers: De Block P, Muasya, Stieperaere H & Bytebier B 360, 361, 480 & 486 (EA).
- Lasianthus kilimandscharicus K.Schum. subsp. kilimandscharicus Habit: Shrub/Tree. Habitat: Understorey of upland rainforest, 1000–1950 m. Vouchers: SA-JIT–006346 (EA, HIB), De Block P, Muasya, Stieperaere H & Bytebier B 247, 249 & 260, Drummond RB & Hemsley JH 4352, Faden RB et al. NMK Exped. 192, Bally PRO 8748, Medley KE 605 & 680 (EA).
- *Meyna tetraphylla* (Schweinf. ex Hiern) Robyns subsp. *comorensis* (Robyns) Verdc. Habit: Shrub/Tree. Habitat: Dry or moist evergreen forest and woodland, riverine, by waterholes, 650–1000 m. Vouchers: SAJIT–005408 (EA, HIB), Medley KE 968 (EA).
- *Mitragyna rubrostipulata* (K.Schum.) Havil. Habit: Tree. Habitat: Fringing forest, wet upland forest, along streams, 1425–1850 m. Vouchers: Faden RB et al. NMK Exped. 770, Faden RB et al. 71/241 (EA).
- Oldenlandia herbacea (L.) Roxb. var. holstii (K.Schum.) Bremek. Habit: Herb. Habitat: *Philippia* heath, grassland, open woodland, rock outcrops, 914–1900 m. Vouchers: SAJIT–005346 (EA, HIB), De Block P, Muasya, Stieperaere H & Bytebier B 306 & 310, Faden RB et al. NMK Exped. 3, 230 & 362, Lewis WH 5931, Hildebrandt JM 2435, Ossent JR 87 (EA).
- Oldenlandia rupicola (Sond.) Kuntze Habit: Herb. Habitat: Rock crevices and outcrops in *Philippia* scrub and upland forest, 2000–2170 m. Vouchers: Drummond RB & Hemsley JH 4299, Verdcourt B & Polhill RM 2722, Faden RB et al. NMK Exped. 76 (EA).
- Oxyanthus goetzei K.Schum. subsp. keniensis Bridson Habit: Shrub/Tree. Habitat: Forest, 825–1875 m. Vouchers: Mwachala G et al. EW3327, Faden RB et al. NMK Exped. 551, Joanna B 8883, Faden RB, Evans A & Rathbun G 69/437, Thulin MI 551 (EA).

- Oxyanthus pyriformis (Hochst.) Skeels subsp. brevitubus Bridson Habit: Shrub/ Tree. Habitat: Dry forest, ca. 1200 m. Voucher: Medley KE 666 (EA). Vulnerable.
- NE Oxyanthus pyriformis (Hochst.) Skeels subsp. longitubus Bridson Habit: Shrub/Tree. Habitat: Moist forest, ca. 1040 m. Voucher: De Block P, Muasya, Stieperaere H & Bytebier B 356 (EA). Endangered.
- Oxyanthus speciosus DC. subsp. stenocarpus (K.Schum.) Bridson Habit: Shrub/Tree. Habitat: Forest, 1540–2117 m. Vouchers: SAJIT–003289 & 004521 (EA, HIB), Bytebier B 1218, De Block P, Muasya, Stieperaere H & Bytebier B 248, 263, 265, 317, 335, 475, 481A, 485A, 488 & 499A, Faden RB et al. NMK Exped. 240, Beentje HJ et al. NMK Exped. 893, Raler I 0008 (EA).
- NE Parapentas battiscombei Verdc. Habit: Herb. Habitat: Forest floor and clearings in upland evergreen forest, 1040–1981 m. Vouchers: Luke WRQ & Luke PA 4139 & 9431, Christenhusz MJM et al. 6662, Beentje HJ et al. NMK Exped. 828 & 1064, De Block P et al. 354, Bally PRO 8768 & 138706 (EA).
- Pauridiantha paucinervis (Hiern) Bremek. Habit: Tree. Habitat: Upland evergreen forest, 1200–1875 m. Vouchers: SAJIT–005309, Watuma BM W0018 & W0050 (EA, HIB), Christenhusz MJM et al. 6633, Joanna B 9030, De Block P et al. 244, 250, 253, 264, 353, 359, 570, Faden RB et al. NMK Exped. 213 & 364, Faden RB & Faden AJ 77/328, Gillett JB, Burtt BL, Osborn RM 17125, Medley KE 930, Lubai lK HB29 (EA).
- Pavetta abyssinica Fresen. subsp. abyssinica Habit: Shrub/Liana. Habitat: Forest and associated scrub, ca. 1630 m. Voucher: Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J 6666 (EA).
- *Pavetta crebrifolia* Hiern var. *crebrifolia* Habit: Shrub. Habitat: Upland and low-land evergreen forest, 660–1640 m. Vouchers: Beentje HJ et al. NMK Exped. 887, Gillett JB 18747, Medley KE 436 & 883 (EA).
- *Pavetta dolichantha* Bremek. Habit: Shrub. Habitat: Bushland and forest edges, ca. 762 m. Voucher: Polhill RM & Kibuwa SP 966 (EA).
- Pavetta gardeniifolia A.Rich. var. gardeniifolia Habit: Shrub. Habitat: Bushland to forest, often on rocky ground, 820–1400 m. Vouchers: Faden RB, Evans A & Githui M 70/164, De Block P, Muasya, Stieperaere H & Bytebier B 347, Medley KE 671, Hildebrandt JM 2570 (EA).
- Pavetta sepium K.Schum. var. sepium Habit: Shrub. Habitat: Ground-water forests, bushland on hillsides, ca. 1219 m. Voucher: Napier ER 1139 (EA). Vulnerable.
- Pavetta teitana K.Schum. Habit: Shrub. Habitat: Forest margins on rocky ground, 660–1250 m. Vouchers: Faden RB, Evans A & Rathbun G 69/430, De Block P et al. 370, Lavranos JJ 11897, Medley KE 469, 730 & 941, Gillett JB 18738, Bally J 13560, Joanna B 9402 (EA). Vulnerable.
- *Pentas lanceolata* (Forssk.) Deflers subsp. *lanceolata* Habit: Subshrub. Habitat: Evergreen forest, bushland, thicket, grassland, 1700–1827 m. Vouchers: Watuma BM W0090 (EA, HIB), Beentje HJ 2133 (EA).

- Pentas lanceolata (Forssk.) Deflers subsp. quartiniana (A.Rich.) Verdc. Habit: Subshrub. Habitat: Edges of paths and glades in secondary evergreen forest, 1350–1560 m. Vouchers: Beentje HJ et al. NMK Exped. 828 & 1064, Bytebier B 1219 (EA).
- Pentas pubiflora S.Moore Habit: Subshrub. Habitat: Dry riverine forest and forest edges, scrub, grassland, lava slopes, 1189–1875 m. Vouchers: Faden RB et al. NMK Exped. 11 & 549, Lewis WH 5930 (EA).
- *Pentas zanzibarica* (Klotzsch) Vatke var. *intermedia* Verdc. Habit: Subshrub. Habitat: Grassland, rocky hillsides, 1600–1830 m. Voucher: Lubai lK HB16 (EA).
- Pentas zanzibarica (Klotzsch) Vatke subsp.. zanzibarica Habit: Subshrub. Habitat: Forest glades and edges, open grassland with scattered trees, 1040–2170 m. Vouchers: Watuma BM W0217 (EA, HIB), Faden RB et al. NMK Exped. 114, De Block P, Muasya, Stieperaere H & Bytebier B 281, 289 & 364, Bally PRO 8707 (EA).
- *Pentodon pentandrus* (Schumach. & Thonn.) Vatke Habit: Herb. Habitat: Seasonally wet ground, moist forest margins, along rivers, 800–1200 m. Vouchers: SAJIT–005353 (EA, HIB), Kabuye CHS et al. NMK Exped. 666 (EA).
- *Phyllopentas schimperi* (Hochst.) Y.D.Zhou & Q.F.Wang Habit: Subshrub. Habitat: Evergreen forest in volcanic soils, 1425–2000 m. Vouchers: Beentje HJ et al. NMK Exped. 911 & 953 (EA).
- *Polysphaeria multiflora* Hiern subsp. *pubescens* Verdc. Habit: Tree. Habitat: Riverine forest and bushland, 800–1158 m. Vouchers: Kabuye CHS et al. NMK Exped. 660, Bally PRO 8578 (EA).
- *Polysphaeria parvifolia* Hiern Habit: Tree. Habitat: Dry evergreen forest, woodland, 1000–1640 m. Voucher: Medley KE 699 (EA).
- NE Psychotria alsophila K.Schum. Habit: Shrub. Habitat: Evergreen forest, 1650–1900 m. Vouchers: Watuma BM W0283 (EA, HIB), Christenhusz MJM et al. 6616, De Block P, Muasya, Stieperaere H & Bytebier B 293, 294, 296 & 320, Beentje HJ 2191, Faden RB et al. NMK Exped. 519, Faden RB, Faden AJ, Smeenk C & Geer T 72/213 (EA). Vulnerable.
- Psychotria capensis (Eckl.) Vatke subsp. riparia (K.Schum. & K.Krause) Verdc. Habit: Shrub/Tree. Habitat: Evergreen bushland, forest edges, riparian forest, 800–1640 m. Vouchers: Kabuye CHS et al. NMK Exped. 641, Medley KE 474, Gilbert MG & Gilbert CI 6103 (EA).
- NE Psychotria crassipetala E.M.A.Petit Habit: Tree. Habitat: Evergreen forest, 1000–1925 m. Vouchers: Wakanene KM & Mwangangi OM 440, 619A, 680 & 736, De Block P et al. 271 & 484, Drummond RB & Hemsley JH 4336, Faden RB et al. NMK Exped. 214 & 426, Faden RB, Evans A, Githui M & Smeenk C 71/258, Faden RB & Faden AJ 72/274, Faden RB & Evans A 69/875, Dale IR 3814 (EA). Endangered.
- *Psychotria cyathicalyx* E.M.A.Petit Habit: Tree. Habitat: Upland evergreen forest, 1900–2205 m. Faden RB & Faden AJ 72/256 (EA). Vulnerable.

- Psychotria lauracea (K.Schum.) E.M.A.Petit Habit: Shrub. Habitat: Evergreen forest, 1000–1900 m. Vouchers: Watuma BM W0048 (EA, HIB), De Block P et al. 340, 342, 343, 346, 373 & 374, Beentje HJ 2143, Faden RB et al. NMK Exped. 37, 205 & 333, Beentje HJ et al. NMK Exped. 863 & 998, Faden RB & Faden AJ 77/339, Dale IR 3851, Raler I 0049, Medley KE 593, 616, 647, 650 & 894 (EA).
- EPsychotria petitii Verdc. Habit: Tree. Habitat: Evergreen forest, 1432–2180 m. Vouchers: SAJIT–006348, Watuma BM W0034 & W0045 (EA, HIB), Luke WRQ & Luke PA 5498, Wakanene KM & Mwangangi OM 334 & 473, Drummond RB & Hemsley JH 4343, Christenhusz MJM et al. 6626 & 6668, De Block P et al. 246, 311, 469 & 477, Faden RB et al. NMK Exped. 165 & 210, Hemp A 5187, Raler I 0012, Faden RB et al. 70/139, 739 & 72/256, Bally PRO 8712 & 8751, Dale IR 3815 (EA). Endangered.
- NE Psychotria pseudoplatyphylla E.M.A.Petit Habit: Shrub. Habitat: Evergreen forest, 1450–1960 m. Vouchers: SAJIT–004516, 004565 & 004595, Wakanene KM, Mwangangi OM & Dunn B 336, 371, 639 & 736, Mutiso 29, Christenhusz, MJM et al. 6625, Drummond RB & Hemsley JH 4334, De Block P et al. 242, 254, 258, 261, 262, 269, 272, 279, 328, 332, 491 & 492, Faden RB et al. NMK Exped. 207, Beenjte HJ et al. NMK Exped. 889, Hemp A 5192, Faden RB et al. 71/233 & 77/336, Dale IR 3816, Raler I 0002 (EA). Vulnerable.
- Psychotria punctata Vatke var. punctata— Habit: Shrub. Habitat: Forest edges, Bushland, open woodland, often in rocky places, Acacia thicket, grassland, cultivated hillsides, 800–1400 m. Vouchers: Mwachala G et al. EW3321, Kabuye CHS 82/143, Kabuye CHS et al. NMK Exped. 656, Faden RB & Faden AJ 74/511, Drummond RB & Hemsley JH 4398, Bally PRO 8583 (EA).
- EPsychotria sp. B of FTEA Habit: Shrub. Habitat: Upland evergreen forest, 1650–1800 m. Vouchers: Faden RB et al. 72/211, Gilbert MG & Gilbert CI 6103 (EA).
- EPsychotria taitensis Verdc. Habit: Tree. Habitat: Mist forest with *Syzygium* and *Rapanea* sp., 1060–1600 m. Vouchers: Luke WRQ & Luke PA 4151 & 9435, De Block P, Muasya, Stieperaere H & Bytebier B 350 & 365, Faden RB, Evans A, Smeenk C & Kariuki B 71/153 (EA). Endangered.
- *Psydrax lividus* (Hiern) Bridson Habit: Shrub. Habitat: Thicket and scrub, rocky hillsides, 836–960 m. Vouchers: Watuma BM W0201 (EA, HIB), Gillett JB 19572 (EA).
- Psydrax parviflorus (Afzel.) Bridson subsp. rubrocostata (Robyns) Bridson Habit: Shrub/Tree. Habitat: Forest, 1400–1875 m. Vouchers: Faden RB & Faden AJ 72/271, Gillett JB, Burtt BL & Osborn RM 17115, Beenje HJ et al. NMK Exped. 844, Faden RB et al. NMK Exped. 308 & 888, Medley KE 663 (EA).
- *Psydrax polhillii* Bridson Habit: Shrub. Habitat: Woodland and thicket, 550–650 m. Vouchers: Luke WRQ & Luke PA 4246, Medley KE 544 (EA). Vulnerable.
- *Psydrax schimperianus* (A.Rich.) Bridson subsp. *schimperianus* Habit: Shrub/ Tree. Habitat: Forest, montane woodland, thicket or bushland, 650–1040 m.

- Vouchers: De Block P, Muasya, Stieperaere H & Bytebier B 348, Medley KE 635, 643, 735 & 859 (EA).
- *Pyrostria phyllanthoidea* (Baill.) Bridson Habit: Shrub. Habitat: In *Acacia*, *Commiphora* bushland, often on rocks, 650–1000 m. Vouchers: SAJIT–005402 (EA, HIB), Medley KE 487, 778, 855 & 962 (EA).
- *Pyrostria* sp. A of FTEA Habit: Tree. Habitat: Dry evergreen forest. Voucher: Joanna B 9403 (EA).
- *Rhodopentas parvifolia* (Hiern) Kårehed & B.Bremer Habit: Subhrub. Habitat: Dry evergreen forest, grassland with scattered trees, 701–1004 m. Vouchers: Watuma BM W0314 (EA, HIB), Polhill RM & Kibuwa SP 956 (EA).
- Rothmannia fischeri (K.Schum.) Bullock ex Oberm. subsp. verdcourtii Bridson Habit: Tree. Habitat: Bushland on rocky hillsides, 609–1371 m. Vouchers: Kabuye CHS 82/35, Kabuye CHS et al. NMK Exped 637, Mwachala G et al. EW913 & 1181, Kokwaro JO 2608, Cheseny CMC 102, Hildebrandt JM 2531, Joanna B 8987, Archer PG 635, Medley KE 549 & 564 (EA).
- Rothmannia ravae (Chiov.) Bridson Habit: Tree. Habitat: Dry evergreen forest, thicket, 900–1900 m. Vouchers: De Block P, Muasya, Stieperaere H & Bytebier B 318, Faden RB, Githui M & Evans A 70/177, Archer PG 619 (EA).
- NE Rytigynia eickii (K.Schum. & K.Krause) Bullock Habit: Shrub. Habitat: Submontane forest, open bushland in granite areas, 1400–1875 m. Vouchers: Watuma BM W0079 (EA, HIB), Kabuye CHS 82/92, Luke WRQ et al. 5502, Chemusto 28, Faden RB et al. NMK Exped. 334, 473 & 535, Beentje HJ et al. NMK Exped. 875, Faden RB & Faden AJ 77/335, Raler I 0055 (EA). Vulnerable.
- Rytigynia uhligii (K.Schum. & K.Krause) Verdc. Habit: Shrub. Habitat: Montane evergreen forest, 1000–2170 m. Vouchers: SAJIT–003300, 006408, Watuma BM W0054, W0078 & W0276 (EA, HIB), De Block P et al. 284A, 295, 298, 323, 330, 331 & 341, Beentje HJ et al. NMK Exped. 1075 & 1118, Faden RB et al. NMK Exped. 51, 119, 253, 262 & 511, Drummond RB & Hemsley JH 4399, Faden RB & Faden AJ 77/334, Gillett JB 23891, Dale IR 1999, Medley KE 913 & 992 (EA).
- Spermacoce princeae (K.Schum.) Verdc. Habit: Herb. Habitat: Grassland, forest and woodland clearings, 1427–2170 m. Vouchers: SAJIT–006410 (EA, HIB), De Block P, Muasya, Stieperaere H & Bytebier B 322, Faden RB et al. NMK Exped. 111 & 434 (EA).
- *Tennantia sennii* (Chiov.) Verdc. & Bridson Habit: Shrub. Habitat: Dry bushland and woodland on red sandy soils, 525–800 m. Vouchers: Mrs. Robertson SA 6529, Medley KE 432, 494, 777, 863 & 960, Faden RB, Evans A & Rathbun G 69/414, Gillett JB 18772, Napier ER 1065, Ossent JR 144 (EA).
- *Vangueria apiculata* K.Schum. Habit: Tree. Habitat: Evergreen forest edges and thicket, rocky slopes, ca. 1814 m. Vouchers: SAJIT–006402 (EA, HIB).
- Vangueria infausta Burch. subsp. rotundata (Robyns) Verdc. Habit: Tree. Habitat: Dry evergreen forest, woodland, 1800–2000 m. Vouchers: SAJIT–004584 (EA, HIB).

- *Vangueria madagascariensis* J.F.Gmel. Habit: Tree. Habitat: Evergreen forest, woodland, 650–1960 m. Vouchers: SAJIT–004567 (EA, HIB), Medley KE 564 & 1013 (EA).
- Vangueria schumanniana (Robyns) Lantz subsp. mucronulata (Robyns) ined. Habit: Shrub/Tree. Habitat: Acacia-Grewia thicket and bushland. Voucher: Lawton RM 1757 (EA).
- Vangueria schumanniana (Robyns) Lantz subsp. schumanniana Habit: Shrub/Tree. Habitat: Acacia-Commiphora-Combretum woodland and bushland, rocky slopes, 650–1000 m. Vouchers: Medley KE 634, 727 & 807 (EA).
- Vangueria volkensii K.Schum. var. volkensii Habit: Tree. Habitat: Evergreen forest edges, rocky slopes, 800–1875 m. Vouchers: Watuma BM W0112 (EA, HIB), Kabuye CHS et al. NMK Exped. 602, Luke WRQ & Bytebier B et al. 5378, Beentje HJ et al. NMK Exped. 878, Drummond RB & Hemsley JH 4376, Raler I 0065, Faden RB et al. NMK Exped. 577 (EA).

## F142. RUTACEAE

6 Genera, 14 species

- Calodendrum capense (L.f) Thunb. Habit: Tree. Habitat: Upland evergreen and riverine forests, 1200–1700 m. Voucher: Gardener in FD 2921 (EA).
- Clausena anisata (Willd.) Hook.f. ex Benth. Habit: Shrub. Habitat: Forest margins and regenerations, bushland, wooded grassland, 1700–1875 m. Vouchers: SAJIT–004600, Watuma BM W0069 (EA, HIB), Mwachala G et al. EW012, Faden RB et al. NMK Exped. 263 (EA).
- *Fagaropsis angolensis* (Engl.) H.M.Gardner Habit: Tree. Habitat: Rainforest edges, drier evergreen forest, 1650–1800 m. Voucher: Faden RB et al. 72/209 (EA).
- *Harrisonia abyssinica* Oliv. Habit: Shrub. Habitat: Dry evergreen forest; forest edges and clearings, 550–1371 m. Vouchers: Watuma BM W0144 (EA, HIB), Mwachala G et al. EW2800, Mungai GM et al. EW1391 & 1657, Medley KE 944, Faden RB, Evans A & Rathbun G 69/416, Joanna B 8885 (EA).
- EVepris fadenii (Kokwaro) Mziray Habit: Tree. Habitat: Mist forest, mountain and hill forests, 1200–1875 m. Vouchers: Luke WRQ & Luke PA 9436, Faden RB et al. NMK Exped. 575, Faden RB et al. 71/57 & 145, Joanna B 9032, Raler I 0037 (EA). Vulnerable.
- Vepris glomerata (F.Hoffm.) Engl. Habit: Shrub/Tree. Habitat: Wooded grassland, deciduous woodland, 550–810 m. Vouchers: Medley KE 755, Vesey-FitzGerald 42 (EA).
- *Vepris* sp. nr. *glomerata* (F.Hoffm.) Engl. Habit: Shrub/Tree. Habitat: Montane woodland, 650–1000 m. Vouchers: Medley KE 480 & 509 (EA).
- Vepris nobilis (Delile) Mziray Habit: Tree. Habitat: Evergreen forest, woodland, rocky hills, 1000–1875 m. Vouchers: Faden RB et al. NMK Exped. 464, Medley KE 1012 (EA).

- Vepris simplicifolia (Engl.) Mziray Habit: Tree. Habitat: Evergreen forest, wooded grassland and bushland, 650–1875 m. Vouchers: Mwachala G et al. EW180 & 3114A, Kimuzi D 3, Faden RB et al. NMK Exped. 526, Medley KE 501 (EA).
- Vepris trichocarpa (Engl.) Mziray Habit: Tree. Habitat: Upland forest, riverine associations, ca. 950 m. Voucher: Mungai GM et al. EW1762 (EA).
- Vepris uguenensis Engl. Habit: Shrub. Habitat: Wooded grassland, riverine, bushland in rocky places, 610–1050 m. Vouchers: Luke WRQ & Luke PA 5514 & 6433, Faden RB & Faden AJ 74/514, Faden RB et al. 71/0114, Gardner HM 2961, Ossent JR 121 (EA).
- Zanthoxylum asiaticum (L.) Appelhans, Groppo & J.Wen Habit: Liana. Habitat: Forest edges, riverine forest, bushland, 1000–1875 m. Vouchers: SAJIT–004122, 004562 & 005310, Watuma BM W0064 (EA, HIB), Faden RB et al. NMK Exped. 228 & 492, Raler I 0021, Medley KE 627 (EA).
- **Zanthoxylum chalybeum Engl.** Habit: Tree. Habitat: Dry bushland and wooded grassland, 550–1000 m. Voucher: Medley KE 495 (EA).
- **Zanthoxylum usambarense** (Engl.) Kokwaro Habit: Tree. Habitat: Upland forest, ca. 1400–1600 m. Vouchers: Joanna B 8935, Kimuzi D 2 (EA).

## F143. SALICACEAE

6 Genera, 7 species

- Bivinia jalbertii Tul. Habit: Tree. Habitat: Evergreen forest, 1200–1600 m. Voucher: Medley KE 910 (EA). Near Threatened.
- *Dovyalis abyssinica* (A.Rich.) Warb. Habit: Shrub. Habitat: Upland rainforest, dry evergreen forest, open wooded grassland, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 242 & 503, Drummond RB & Hemsley JH 4285, Raler I 0092 (EA).
- Flacourtia indica (Burm.f.) Merr. Habit: Shrub. Habitat: Forest, woodland, wooded grassland, bushland, riparian, 950–1150 m. Vouchers: Mwachala G et al. EW614 & 3263, Mungai GM et al. EW1752 (EA).
- Ludia mauritiana J.F.Gmel. Habit: Shrub/Tree. Habitat: Dry evergreen forest, riverine woodland, 650–1350 m. Vouchers: Kabuye CHS 82/130, Kabuye CHS et al. NMK Exped. 616, Mwachala G et al. EW64, Luke WRQ et al. 5343, Faden RB et al. 71/135, Medley KE 590, 607, 630, 641, 794 & 800 (EA).
- **Scolopia rhamniphylla Gilg** Habit: Tree. Habitat: Rainforest, dry evergreen forest, 800–1000 m. Vouchers: Medley KE 587 & 673 (EA).
- Scolopia theifolia Gilg Habit: Tree. Habitat: Upland dry evergreen forest, 800–1000 m. Voucher: Medley KE 901 (EA).
- *Trimeria grandifolia* (Hochst.) Warb. subsp. *tropica* (Burkill) Sleumer Habit: Shrub/Tree. Habitat: Rainforest, dry evergreen and riverine forest, 1250–1875 m. Vouchers: Watuma BM W0076 (EA, HIB), Kabuye CHS 82/86 & 145, Luke WRQ & Robertson SA 507, Wakanene KM & Mwangangi OM 459, Faden RB

et al. NMK Exped. 327, Raler I 0043, Christenhusz MJM, Kamau P, Chase MW, Mbale M & Kyaa J 6636 (EA).

## F144. SALVADORACEAE

2 Genera, 2 species

**Dobera glabra** (Forssk.) Juss. ex Poir. – Habit: Tree. Habitat: *Acacia-Commiphora* scrub on rocky hillsides, 500–670 m. Vouchers: Medley KE 977, Zùmer M 39 (EA).

Salvadora persica L. – Habit: Shrub. Habitat: Acacia-Commiphora thicket, 550–650 m. Voucher: Medley KE 974 (EA).

## F1145. SANTALACEAE

3 Genera, 4 species

- Osyridicarpos schimperianus (Hochst. ex A.Rich.) A.DC. Habit: Shrub. Habitat: Upland dry evergreen forest, deciduous woodland, riverine, 900–1100 m. Vouchers: Mwachala G et al. EW816 & 1503 (EA).
- Osyris lanceolata Hochst. & Steud. Habit: Shrub. Habitat: Upland dry evergreen forest, mist forest and associated bushland, deciduous woodland, 650–2050 m. Vouchers: SAJIT–004119 & 005306, Watuma BM W0146 (EA, HIB), Kabuye CHS 82/147, Mwachala G et al. EW214, 430, 571, 925, 1185 & 1500, Wakanene KM & Mwangangi OM 341 & 442, Beentje HJ et al. NMK Exped. 848 & 1080, Faden RB et al. NMK Exped. 238, Drummond RB & Hemsley JH 4293, Raler I 0072, Medley KE 580, 741 & 803, Gardner HM 2994 (EA).
- *Thesium radicans* Hochst. ex A.Rich. Habit: Herb. Habitat: Short grassland, grazed places, rock crevices, 1040–1100 m. Voucher: Mwachala G et al. EW326 (EA).
- **Thesium schweinfurthii** Engl. Habit: Herb. Habitat: Upland grassland, mixed bushland, disturbed places and burnt areas, ca. 1420 m. Voucher: Mungai GM et al. EW3097A (EA).

#### F146. SAPINDACEAE

10 Genera, 13 species

- Allophylus abyssinicus (Hochst.) Radlk. Habit: Tree. Habitat: Moist and dry upland forest margins, 1584–1875 m. Vouchers: Watuma BM W0133 & W0278 (EA, HIB), Faden RB et al. NMK Exped. 501, Faden RB et al. 71/262a (EA).
- *Allophylus ferrugineus* Taub. Habit: Shrub. Habitat: Forest, often by stream sides, 950–1875 m. Vouchers: Faden RB et al. NMK Exped 573, Mwachala G et al. EW930 (EA).
- *Allophylus rubifolius* (Hochst. ex A.Rich.) Engl. Habit: Liana/Shrub. Habitat: Upland forest, woodland, *Commiphora-Acacia* bushland, grassland with scattered, 600–1875 m. Vouchers: Faden RB et al. NMK Exped. 522, Medley KE 448 & 456, Hildebrandt JM 2562 (EA).

- *Blighia unijugata* Baker Habit: Tree. Habitat: Evergreen forest, ca. 1200 m. Voucher: Faden RB et al. 71/59 (EA).
- Cardiospermum corindum L. Habit: Climber. Habitat: Acacia-Commiphora bushland and woodland, riverine, scrub on rocky hills, 600–900 m. Voucher: Hildebrandt JM 2565 (EA).
- *Deinbollia borbonica* **f.** *glabrata* **Radlk.** Habit: Shrub. Habitat: Riverine *Acacia* thorn bush and evergreen thicket, *Acacia-Combretum* woodland, 630–874 m. Vouchers: Drummond RB & Hemsley JH 4277, Kimeu JM, Meso M & Meroka D KEFRI 519 (EA).
- **Deinbollia kilimandscharica Taub.** Habit: Shrub/Tree. Habitat: Evergreen forest, montane woodland, 650–1100 m. Vouchers: Medley KE 880, Mwachala G et al. EW236, Mungai GM et al. EW1350 (EA).
- Dodonaea viscosa Jacq. subsp. angustifolia (L.f.) J.G.West Habit: Shrub. Habitat: Disturbed upland evergreen forest, woodland and thicket, 1158–1850 m. Vouchers: SAJIT–005305, Watuma BM W0093 (EA, HIB), Mwachala G et al. EW436 & 575, Wakanene KM & Mwangangi OM 247, Beentje HJ et al. NMK Exped. 876, Faden RB et al. NMK Exped. 34, Murray High School 21, Napier ER 1103, Raler I 0115, Heller E s.n. (EA).
- Filicium decipiens (Wight & Arn.) Thwaites Habit: Tree. Habitat: Mixed forest in river valleys, 970–1260 m. Vouchers: Kabuye CHS et al. NMK Exped. 802, Mwachala G et al. EW1574, Beentje HJ et al. NMK Exped. 1182, Raler I 0122 (EA).
- Haplocoelum foliolosum (Hiern) Bullock subsp. strongylocarpum (Bullock) Verdc.
   Habit: Tree. Habitat: Riverine forest, grassland with Combretum, dry thicket and bushland, 650–1875 m. Vouchers: Mwachala G et al. EW3322, Wakanene KM & Mwangangi OM 511, Faden RB et al. NMK Exped. 517, Medley KE 861, Faden RB et al. 72/202, Raler I 0074 (EA).
- *Lecaniodiscus fraxinifolius* Baker subsp. *vaughaniae* (Dunkley) Friis Habit: Tree. Habitat: Riverine, deciduous bushland and woodland, 650–1000 m. Vouchers: SAJIT–004637 (EA, HIB), Kabuye CHS et al. NMK Exped. 646, Luke WRQ et al. 5345, Medley KE 569 (EA).
- Pancovia golungensis (Hiern) Exell & Mendonça Habit: Tree. Habitat: Moist evergreen forest, riverine forest, 1000–1640 m. Vouchers: Luke WRQ & Luke PA 9432B, Luke WRQ et al. 5322, Medley KE 662, 667, 918 & 934, Faden RB & Evans A 71/138 (EA).
- Pappea capensis Eckl. & Zeyh. Habit: Tree. Habitat: Grassland with scattered trees, woodland, 650–1100 m. Vouchers: Mwachala G et al. EW101, 202 & 974, Mungai GM et al. EW1663, Medley KE & Muasya J 820 (EA).

## F147. SAPOTACEAE

6 Genera, 9 species

*Donella viridifolia* (J.M.Wood & Franks) Aubrév. & Pellegr. – Habit: Tree. Habitat: Upland moist evergreen forest, 1000–1640 m. Voucher: Medley KE 693 (EA).

- Englerophytum natalense (Sond.) T.D.Penn. Habit: Tree. Habitat: Upland rainforest, riverine forest, 1425–1875 m. Vouchers: SAJIT–005331 (EA, HIB), Faden RB et al. NMK Exped. 307, Beentje HJ et al. NMK Exped. 1005, Faden RB et al. 70/570, Raler I 0046 (EA).
- Gambeya gorungosana (Engl.) Liben Habit: Tree. Habitat: Upland rainforest, commonly associated with *Podocarpus* sp. and *Ocotea usambarensis*, 1700–1875 m. Vouchers: Faden RB NMK Exped. 287, Drummond RB & Hemsley JH 4364 & 4365, Raler I 0033 (EA).
- *Manilkara discolor* (Sond.) J.H.Hemsl. Habit: Tree. Habitat: Upland dry evergreen forest, upland rainforest in well drained sites, 800–1615 m. Vouchers: Watuma BM W0269 (EA, HIB), Medley KE 588 & 920 (EA).
- Manilkara mochisia (Baker) Dubard Habit: Tree. Habitat: Deciduous bushland, dry scrub with trees, ca. 700 m. Voucher: Medley KE 952 (EA).
- Manilkara sulcata (Engl.) Dubard Habit: Shrub/Tree. Habitat: Evergreen bushlands and thickets, 700–1100 m. Vouchers: SAJIT-005415 (EA, HIB), Faden RB & Faden AJ 74/466, Gilbert MG & Gilbert CI 6116, Bally PRO 13586, Medley KE 942 (EA).
- *Mimusops obtusifolia* Lam. Habit: Tree. Habitat: Riverine forest, montane woodland, 650–1000 m. Voucher: Medley KE 884 (EA).
- *Mimusops somalensis* Chiov. Habit: Tree. Habitat: Evergreen bushland. ca. 650 m. Voucher: Bytebier B 1737 (EA).
- Pouteria adolfi-friedericii (Engl.) A.Meeuse subsp. adolfi-friedericii Habit: Tree. Habitat: Rainforest, 1350–1875 m. Vouchers: Faden RB et al. NMK Exped. 225, Raler I 0078, Faden RB et al. 71/237 (EA).

## F148. SCROPHULARIACEAE

1 Genus, 1 species

Buddleja pulchella N.E.Br. – Habit: Shrub. Habitat: Upland forest margins and upland evergreen bushland, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 465 & 482, Drummond RB & Hemsley JH 4327, Gardner HM 2940, Raler I 0116 (EA).

## F149. SIMAROUBACEAE

1 Genus, 1 species

Brucea antidysenterica J.F.Mill. – Habit: Shrub/Tree. Habitat: Evergreen rainforest, forest margins, secondary margins, 1500–2170 m. Vouchers: SAJIT–004522, 004526 & 006387, Watuma BM W0047 (EA, HIB), Wakanene KM & Mwangangi OM 627, Christenhusz MJM et al. 6618, Faden RB et al. NMK Exped. 163, Faden RB & Faden AJ 72/270, Hemp A 5191, Joanna B 9013 (EA).

# F150. SOLANACEAE

5 Genera, 19 species

- \*Nicandra physalodes (L.) Gaertn. Habit: Herb. Habitat: Weed of cultivation, forest clearings, secondary bushland, wasteland, 1000–1200 m. Voucher: Mwachala G et al. EW1281 (EA).
- \*Nicotiana tabacum L. Habit: Herb. Habitat: Dry evergreen forest, bushland, homesteads, roadsides, 1100–1300 m. Voucher: Mwachala G et al. EW1186 (EA).
- \**Physalis peruviana* L. Habit: Herb. Habitat: Forest margins and clearings, disturbed areas, weed of cultivated places, 1675–1750 m. Vouchers: Watuma BM W0121 (EA, HIB), Wakanene KM & Mwangangi OM 552 (EA).
- **Solanum aculeastrum Dunal** Habit: Shrub/Tree. Habitat: Forest margins, scrub, disturbed open places, 1402–1728 m. Vouchers: Watuma BM W0060 (EA, HIB), Napier ER 1131 (EA).
- \*Solanum aculeatissimum Jacq. Habit: Shrub. Habitat: Moist and evergreen dry forest, *Acacia-Commiphora* woodland, 1425–1850 m. Voucher: Faden RB et al. NMK Exped. 413 (EA).
- **Solanum anguivi Lam.** Habit: Shrub. Habitat: Forest and forest edges, disturbed areas, along roadsides, 1400–1875 m. Vouchers: Faden RB et al. NMK Exped. 45, 414 & 518, Beentje HJ et al. NMK Exped. 1108 (EA).
- **Solanum dasyphyllum Schumach. & Thonn.** Habit: Subshrub. Habitat: Forest, wooded grassland, wasteland, 900–1250 m. Vouchers: Mwachala G et al. EW1267, Napier ER 1127 (EA).
- **Solanum giganteum Jacq.** Habit: Shrub. Habitat: Moist forest, secondary bushland, 1425–1850 m. Vouchers: Faden RB et al. NMK Exped. 376, Raler I s.n. (EA).
- **Solanum incanum L.** Habit: Shrub. Habitat: Thickets, bushland, wooded grassland, 550–875 m. Vouchers: SAJIT–004609 (EA, HIB), Medley KE p.r. (EA).
- **Solanum mauense Bitter** Habit: Shrub. Habitat: Forest edge, secondary bushland, along roadsides, ca. 2024 m. Voucher: SAJIT–006361 (EA, HIB).
- \*Solanum mauritianum Scop. Habit: Shrub/Tree. Habitat: Forest margins, escaped from cultivated land, ca. 1584 m. Voucher: Watuma BM W0129 (EA, HIB).
- **Solanum nakurense C.H.Wright** Habit: Subshrub. Habitat: *Acacia* scrub, roadsides, bare ground. Vouchers: Joanna B & Opiko 8758 & 8996 (EA).
- Solanum nigrum L. Habit: Herb. Habitat: Forest edges, streambanks, Acacia-Commiphora woodland on rocky slopes, old cultivations, ca. 1800 m. Vouchers: Wakanene KM & Mwangangi OM 734, Kluguess LM 74 (EA).
- \*Solanum seaforthianum Andrews Habit: Climber. Habitat: Semideciduous forest, grassland, farmland, plantations, 850–1100 m. Vouchers: Mwachala G et al. EW31, 117 & 1203, Cheseny CMC 30/72 (EA).
- **Solanum schumannianum Dammer** Habit: Shrub. Habitat: Semi-deciduous and evergreen forest, secondary forest, margins of cultivation, 1402–2170 m. Vouchers:

- SAJIT-004527, Watuma BM W0075 (EA, HIB), Wakanene KM & Mwangangi OM 9 & 845, Christenhusz MJM et al. 6642, Drummond RB & Hemsley JH 4309, Verdcourt B & Polhill RM 2734, Napier ER 1134, Bally PRO 8754, Faden RB et al. NMK Exped. 128 & 323, Gillett JB, Burtt BL & Osborn RM 17104 (EA).
- Solanum terminale Forssk. Habit: Liana. Habitat: Forest, forest margins, secondary forest, bushland, 1250–1875 m. Vouchers: SAJIT–004127 & 006392, Watuma BM W0070 & W0119 (EA, HIB), Mwachala G et al. EW1251 & 3543, Wakanene KM & Mwangangi OM 185 & 743, Faden RB et al. NMK Exped. 266 & 483, Beentje HJ et al. NMK Exped. 857, Napier ER 1132, Kluguess LM 67, Kirika P et al. s.n. (EA).
- Solanum tettense Klotzsch Habit: Shrub. Habitat: Acacia-Commiphora-Euphorbia bushland, riverine, cultivation, 550–1000 m. Vouchers: Mwachala G et al. EW3299, Engler A 1971, Medley KE 988 (EA).
- **Solanum villosum Mill.** Habit: Herb. Habitat: Forest, riverine, bushland, cultivated and abandoned lands, 821–1612 m. Vouchers: Watuma BM W0303 (EA, HIB), Polhill RM & Kibuwa SP 974 (EA).
- Withania somnifera (L.) Dunal Habit: Subshrub. Habitat: Acacia-Commiphora bushland, weed in old cultivations and disturbed places, 457–925 m. Vouchers: Mungai GM et al. EW3584, Katende AB, Lye K & Lye A 4786, Mrs. Robertson SA 3672, Bally PRO 8743, Greenway PJ & Kanuri K 12891 (EA).

## F151. STILBACEAE

2 Genera, 4 species

- *Halleria lucida* L. Habit: Tree. Habitat: Montane forest and forest margins, ca. 1850 m. Voucher: SAJIT–006370 (EA, HIB).
- Nuxia congesta R.Br. ex Fresen. Habit: Tree. Habitat: Upland rainforest, 1250–2170 m. Voucher: Kabuye CHS 82/81, Wakanene KM & Mwangangi OM 454 & 646, Beentje HJ 2189, Faden RB et al. NMK Exped. 104 & 542, Raler I 0107, Medley KE 660 & 996 (EA).
- Nuxia floribunda Benth. Habit: Tree. Habitat: Margins and relic patches of upland rainforest, 1350–1960 m. Vouchers: SAJIT–004564, Watuma BM W0097 (EA, HIB), Mungai GM et al. EW3090A, Luke WRQ & Luke PA 4199, Beentje HJ et al. NMK Exped. 874, 909 & 1077, Faden RB et al. NMK Exped. 25, 383 & 502, Drummond RB & Hemsley JH 4392, Raler I 0095, Dale IR 3783 (EA).
- *Nuxia oppositifolia* (Hochst.) Benth. Habit: Tree. Habitat: Riverine forest, 609–850 m. Vouchers: Mwachala G et al. EW3337, Gardner HM 3001 (EA).

## F152. TALINACEAE

1 Genus, 2 species

*Talinum caffrum* (Thunb.) Eckl. & Zeyh. – Habit: Herb. Habitat: Rocky places in open woodland or grassland, 750–859 m. Vouchers: SAJIT–006416 (EA, HIB), Hucks M 466 (EA).

*Talinum portulacifolium* (Forssk.) Asch. ex Schweinf. – Habit: Herb. Habitat: Open dry woodland or grassland in the hotter and drier parts, 600–1050 m. Vouchers: SAJIT–004616, Watuma BM W0174 (EA, HIB), Kabuye CHS et al. NMK Exped. 628, Mwachala G et al. EW3288, Gillett JB 19580, Bally PRO 8734 & 14157 (EA).

# F153. THYMELAEACEAE

4 Genera, 5 species

- NE Dicranolepis usambarica Gilg Habit: Shrub. Habitat: Evergreen forest, 1425–1875 m. Vouchers: SAJIT–005318 & 006423 (EA, HIB), Beentje HJ et al. NMK Exped. 945, Faden RB et al. NMK Exped. 338 & 762, Faden RB et al. 69/830, 70/560 & 708, Wakanene KM & Mwangangi OM 277, 390 & 464, Gillett JB et al. 17154, Joanna B 9000, Christenhusz MJM et al. 6670, Gardner HM 2938, Raler I 0038, Muhesi 21 (EA).
- Englerodaphne subcordata (Meisn.) Engl. Habit: Shrub. Habitat: Upland dry evergreen forest and associated bushland, 1170–1450 m. Vouchers: Wakanene KM & Mwangangi OM 318 & 526, Mungai GM et al. EW3580, Joanna B 8914 (EA).
- Gnidia involucrata Steud. ex A.Rich. Habit: Shrub. Habitat: Open wooded grassland, deciduous woodland and bushland, 1180–1371 m. Vouchers: Mwachala G et al. EW256, 381 & 3146, Luke WRQ et al. 5558, Gardner HM 2954 (EA).
- Gnidia stenophylla Gilg Habit: Herb. Habitat: Grassland subject to burning and wooded grassland, 1350–1707 m. Vouchers: Beentje HJ et al. NMK Exped. 1138, Luke WRQ et al. 5559, Gardner HM 2955 (EA).
- Lasiosiphon latifolius (Oliv.) Brenan Habit: Shrub. Habitat: Upland evergreen bushland, wooded grassland, 550–1200 m. Vouchers: SAJIT–005307, Watuma BM W0002 (EA, HIB), Kabuye CHS et al. NMK Exped. 689, Mwachala G et al. EW100 & 518, Wakanene KM & Mwangangi OM 476, Medley KE 462 & 540, Christenhusz MJM et al. 6661, Gillett JB 18748, Bally PRO 8718 (EA).

## F154. URTICACEAE

7 Genera, 11 species

- *Droguetia debilis* Rendle Habit: Herb. Habitat: Undergrowth of upland rainforest, 2000–2100 m. Voucher: SAJIT–004589 (EA, HIB).
- *Elatostema monticola* Hook.f. Habit: Herb. Habitat: Upland rainforest, in moist vegetation on forest floor, near streams, 1425–1875 m. Vouchers: Faden RB et al. NMK Exped. 773 & 774, Faden RB et al. 70/544, Christenhusz MJM et al. 6643, Gillett JB, Burtt BL & Osborn RM 17156 (EA).
- *Obetia radula* (Baker) Baker ex B.D.Jacks. Habit: Tree. Habitat: Evergreen or semi-evergreen bushland on basement complex, 650–1000 m. Voucher: Medley KEM pr.
- Parietaria debilis G.Forst. Habit: Herb. Habitat: Upland rainforest, evergreen bushland in shade, under rocks, ca. 1350 m. Voucher: Mwachala G et al. EW3113A (EA).

- *Pilea johnstonii* Oliv. Habit: Herb. Habitat: Upland rainforest and montane forest, 1400–1750 m. Vouchers: Watuma BM W0212 (EA, HIB), Wakanene KM & Mwangangi OM 233, 335 & 466, Faden RB et al. NMK Exped. 41 (EA).
- *Pilea rivularis* Wedd. Habit: Herb. Habitat: Upland rainforest, along streams and moist places, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 348 (EA).
- *Pilea* c.f. *usambarensis* Engl. Habit: Herb. Habitat: Upland rainforest, 1425–2000 m. Vouchers: Faden RB et al. 72/275, Dale IR 7119, Drummond RB & Hemsley JH s.n. (EA).
- *Pilea usambarensis* Engl. var. *usambarensis* Habit: Herb. Habitat: Evergreen forest floor, disturbed forest patches, 1900–2195 m. Vouchers: Verdcourt B & Polhill RM 2723, Drummond RB & Hemsley HJ 4316 (EA).
- *Pilea usambarensis* Engl. var. *engleri* (Rendle) Friis Habit: Herb. Habitat: Upland rainforest in leaf litter, 1896–1950 m. Vouchers: SAJIT–004532 & 006349 (EA, HIB).
- *Pilea usambarensis* Engl. var. *veronicifolia* (Engl.) Friis Habit: Herb. Habitat: Upland rainforest in disturbed places, 2000–2170 m. Voucher: Faden RB et al. NMK Exped. 98 (EA).
- *Pouzolzia parasitica* (Forssk.) Schweinf. Habit: Herb. Habitat: Rainforest along paths and streams, 1400–1640 m. Vouchers: Faden RB et al. NMK Exped. 13 (EA).
- *Urera hypselodendron* (Hochst. ex A.Rich.) Wedd. Habit: Liana. Habitat: Upland rainforest especially in clearings and near edges, 1500–2200 m. Vouchers: Faden RB et al. NMK Exped. 101 & 200, Raler I 0148 (EA).
- *Urera trinervis* (Hochst.) Friis & Immelman Habit: Liana. Habitat: Lowland rainforest, riverine forest, along forest margins and clearings, 900–1640 m. Vouchers: Faden RB et al. 71/116, Medley KE s.n. (EA).

## F155. VERBENACEAE

- 3 Genera, 6 species
- \*Lantana camara L. Habit: Shrub. Habitat: Forest clearings, roadsides, old cultivations, 650–1000 m. Voucher: Medley KEM s.r. (EA).
- *Lantana ukambensis* (Vatke) Verdc. Habit: Subshrub. Habitat: Forest edges, wooded grassland, open woodland, old cultivations, granite rocks, 1700–1875 m. Voucher: Faden RB et al. NMK Exped. 223 (EA).
- Lantana viburnoides (Forssk.) Vahl subsp. kisi (A.Rich.) Verdc. Habit: Shrub. Habitat: Secondary scrub, bushed grassland, ca. 1000–1300 m. Vouchers: Bally PRO 8720, Gardner HM 2993 (EA).
- *Lippia kituiensis* Vatke Habit: Subshrub. Habitat: Bushland, woodland, rough grassland on volcanic rocks, 1200–1300 m. Voucher: Murray High School 19 (EA).
- Lippia javanica (Burm.f.) Spreng. Habit: Shrub. Habitat: Combretum woodland, forest clearings, scrub bushland, 970–1180 m. Voucher: Mwachala G et al. EW357 (EA).

\*Stachytarpheta urticifolia Sims – Habit: Subshrub. Habitat: Flood plain, bushland, roadside weed, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 665 (EA).

## F156. VIOLACEAE

3 Genera, 4 species

- Afrohybanthus enneaspermus (L.) Flicker Habit: Herb. Habitat: Wooded grassland, cultivated and waste places, ca. 1160 m. Voucher: Mwachala G et al. EW298 (EA).
- Rinorea angustifolia (Thouars) Baill. subsp. ardisiiflora (Oliv.) Grey-Wilson Habit: Shrub. Habitat: Evergreen forest, 1700–1875 m. Vouchers: Faden RB et al. NMK Exped. 476 & 536, Beentje HJ 2188 (EA).
- *Rinorea elliptica* (Oliv.) Kuntze Habit: Tree. Habitat: Lowland evergreen forest, 650–1000 m. Voucher: Medley KEM s.n. (EA).
- *Viola abyssinica* Steud. ex Oliv. Habit: Herb. Habitat: Montane forest margins, forest clearings, moist grassland, 1400–2000 m. Vouchers: Drummond RB & Hemsely JH 4314, Faden RB et al. NMK Exped. 106, Christenhusz MJM et al. 6652, Gillett JB et al. 17086 & 17255, Joanna B 8815, Faden RB & Evans A 70/491 (EA).

## F157. VITACEAE

3 Genera, 21 species

- Cissus adeyana Masinde & L.E.Newton Habit: Climber. Habitat: Scattered scrub on rocky ground, dry *Acacia-Commiphora* bushland on rocky limestone ridge, 1128–1200 m. Vouchers: Luke PA & Luke WRQ 5512, Bally PRO 8123 (EA).
- Cissus albiporcata Masinde & L.E.Newton Habit: Climber. Habitat: Bushland in rocky areas, 440–500 m. Vouchers: Masinde PS 336 & 360, Mbugua PK 387a (EA).
- Cissus aphyllantha Gilg Habit: Shrub/Liana. Habitat: Acacia desert thorn bush, ca. 800 m. Voucher: Drummond RB & Hemsley JH 4417 (EA).
- Cissus cactiformis Gilg Habit: Climber. Habitat: Commiphora, Acacia, Combretum woodland, 487–609 m. Vouchers: Hucks M 1046, Sheldrick DB 8796, Napier ER 1022 (EA).
- Cissus oliveri (Engl.) Gilg ex Engl. Habit: Climber. Habitat: Forest in riverine areas, valleys and open areas, 1400–1875 m. Vouchers: SAJIT–005349, Watuma BM W0019, 0062 & 0084 (EA, HIB), Faden RB et al. NMK Exped. 353, 428 & 800, Beentje HJ et al. NMK Exped. 846, Drummond RB & Hemsley JH 4382 (EA).
- Cissus petiolata Hook.f. Habit: Climber. Habitat: Forest edges, riverine forest, Acacia mixed bushland, rocky grounds with scattered trees, 1100–1358 m. Vouchers: Watuma BM W0233 (EA, HIB), Joanna B & Opiko 8763 (EA).
- Cissus phymatocarpa Masinde & L.E.Newton Habit: Climber. Habitat: Forest edge, bushland and thicket, ca. 914 m. Voucher: Napier ER 939 (EA).

- *Cissus quadrangularis* L. Habit: Liana. Habitat: Montane woodland, bushland, riverine thicket, 720–1000 m. Vouchers: Mwachala G et al. EW844 & 952A, Medley KE 949, Faden RB & Faden AJ 74/251, SAJIT s.n. (EA).
- Cissus rotundifolia Vahl Habit: Liana. Habitat: Dry forest, Acacia-Commiphora scrub, 600–1150 m. Vouchers: Watuma BM W0183 (EA, HIB), Mwachala G et al. EW75, 173, 477 & 1182, Medley KE 948 (EA).
- Cissus sciaphila Gilg Habit: Climber. Habitat: Forest, riverine forest fringes, 1750–1800 m. Voucher: Christenhusz M, Chase MW, Kamau P, Mbale & Kyaa J 6672 (EA).
- Cissus sylvicola Masinde & L.E.Newton Habit: Liana. Habitat: Evergreen forest, forest on rocky hill, 800–950 m. Voucher: Kabuye CHS et al. NMK Exped. 700 (EA).
- NE Cyphostemma braunii (Gilg & M.Brandt) Desc. Habit: Climber. Habitat: Margins evergreen forest with *Podocarpus* sp. and *Ocotea* sp., 1350–1450 m. Voucher: Beentje HJ et al. NMK Exped. 1081 (EA).
- Cyphostemma buchananii (Planch.) Desc. ex Wild & R.B.Drumm. Habit: Climber. Habitat: Evergreen forest, bushland, woodland, 1000–1875 m. Vouchers: Faden RB et al. NMK Exped. 521, 556 & 396 (EA), Mungai G et al. EW 2829 (EA).
- Cyphostemma cyphopetalum (Fresen.) Desc. ex Wild & R.B.Drumm. subsp. cyphopetalum Habit: Climber. Habitat: Evergreen forest margins, 1700–1875 m. Vouchers: Watuma BM W0083 (EA, HIB), Faden RB et al. NMK Exped. 396 & 521 (EA).
- Cyphostemma cyphopetalum var. nodiglandulosum (T.C.E.Fr.) Verdc. Habit: Climber. Habitat: Forest margins, grassland with scattered trees, 800–2170 m. Vouchers: Kabuye CHS et al. NMK Exped. 635, Faden RB et al. NMK Exped. 160 (EA).
- *Cyphostemma digitatum* (Lam.) Desc. Habit: Climber. Habitat: *Acacia-Grewia* bushland and thicket on rocky hillsides, ca. 600 m. Voucher: Hucks M 726 (EA).
- Cyphostemma hildebrandtii (Gilg) Desc. ex Wild & R.B.Drumm. Habit: Climber. Habitat: Evergreen forest, Commiphora-Terminalia-Acacia bushland, 1220–1371 m. Vouchers: Hildebrandt JM 2436, Napier ER 1107 (EA).
- *Cyphostemma jiguu* Verdc. Habit: Climber. Habitat: Riverine bush with scattered trees, 1200–1350 m. Voucher: SAJIT–005356 (EA, HIB).
- Cyphostemma knittelii (Gilg) Desc. Habit: Climber. Habitat: Acacia-Commiphora-Combretum bushland and woodland, ca, 884 m. Voucher: Watuma BM W0031 (EA, HIB).
- *Cyphostemma thomasii* (Gilg & M.Brandt) Desc. Habit: Climber. Habitat: Forest margins, deciduous woodland, ca. 1422 m. Voucher: Watuma BM W0238 (EA, HIB).
- Rhoicissus revoilii Planch. Habit: Liana. Habitat: Secondary forest edges, woodland, bushland, grassland, 550–1569 m. Vouchers: Watuma BM W0253 (EA,

HIB), Wakanene KM & Mwangangi OM 493, Medley KE 493, Gillett JB 19569 (EA).

*Rhoicissus tridentata* (L.f.) Wild & R.B.Drumm. – Habit: Liana. Habitat: Forest edges, thicket and scrub often on rock crevices, ca. 1769 m. Vouchers: Kabuye CHS 82/84, Raler I 0132 (EA).

# F158. XIMENIACEAE

1 Genus, 1 species

Ximenia caffra Sond. – Habit: Shrub/Tree. Habitat: Dry woodland and bushland, 500–650 m. Voucher: Medley KE 967 (EA).

# F159. ZYGOPHYLLACEAE

1 Genus, 2 species

**Balanites aegyptiaca** (L.) Delile – Habit: Shrub/Tree. Habitat: Montane woodland, deciduous bushland, scattered tree grassland, 550–1000 m. Voucher: Medley KE 485 (EA).

Balanites pedicellaris Mildbr. & Schltr. subsp. pedicellaris – Habit: Shrub/Tree. Habitat: Deciduous bushland, ca. 560 m. Vouchers: Medley KE 770, Mildbraed 19 (EA).

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## References

Addi A, Soromessa T, Kelbessa E, Dibaba A, Kefalew A (2016) Floristic composition and plant community types of Agama Forest, an "Afromontane Forest" in Southwest Ethiopia.

- Journal of Ecology and the Natural Environment 8(5): 55–69. https://doi.org/10.5897/ JENE2015.0547
- Aerts R, Thijis KW, Lehouck V, Beentje H, Bytebier B, Matthysen E, Gulinck H, Lens L, Muys B (2011) Woody plant communities of isolated Afromontane cloud forests in Taita Hills, Kenya. Plant Ecology 212(4): 639–649. https://doi.org/10.1007/s11258-010-9853-3
- African Plant Database (2021) (version 3.4.0) Conservatoire et Jardin botaniques de la Ville de Genève and South African National Biodiversity Institute, Pretoria. http://www.ville-ge.ch/musinfo/bd/cjb/africa/ [Retrieved 20.5.2021]
- Agnew ADQ (2013) Upland Kenya wild flowers and ferns, third edition. Nature Kenya Publications, Nairobi.
- Asongu SA, Jingwa BA (2012) Population growth and forest sustainability in Africa. International Journal of Green Economics 6(2): 145–166. https://doi.org/10.1504/IJGE.2012.050353
- Beentje HJ (1988) An ecological and floristic study of the forests of Taita Hills, Kenya. Utafiti 1(2): 23–66.
- Beentje HJ (1994) Kenya trees, shrubs and lianas. National Museums of Kenya, Nairobi.
- Beentje HJ (1996) Centers of plant diversity in Africa. In: van der Maesen LJG, van der Burgt XM, van Medenbach de Rooy JM (Eds) The Biodiversity of African Plants. Springer, Dordrecht, 101–109. https://doi.org/10.1007/978-94-009-0285-5\_15
- Beentje HJ (1998) J.M. Hildebrandt (1847–1881): Notes on his travels and plant collections. Kew Bullettin 53(4): 835–856. http://www.jstor.org/stable/4118872
- BirdLife International (2021) Important Bird Areas factsheet: Taita Hills Forests. http://www.birdlife.org [accessed 09.04.2021]
- Borghesio L, Wagura L, Githiru M (2017) Priority plantations for forest restoration in the Taita hills. Nature Kenya (BirdLife Partner in Kenya) and the RSPB (BirdLife UK), 1–16.
- Brooks MT (2010) Conservation planning and priorities. In: Sodhi NS, Elrich PR (Eds) Conservation biology for all. Oxford University Press, New York, 199–219. https://doi.org/10.1093/acprof:oso/9780199554232.003.0012
- Brooks TM, Mittermeir RA, Mittermeir CG, Da Fonseca GAB, Rylands AB, Konstant WR, Flick P, Pilgrim J, Oldfield S, Magin G, Hilton-Taylor C (2002) Habitat loss and extinction in the hotspots of biodiversity. Conservation Biology 16(4): 909–923. https://doi.org/10.1046/j.1523-1739.2002.00530.x
- Burgess ND, Butynski TM, Cordeiro NJ, Doggart NH, Fjeldså J, Howell KM, Kilahama FB, Loader SP, Lovett JC, Mbilinyi B, Menegon M, Moyer DC, Nashanda E, Perkin A, Rovero F, Stanley WT, Stuart SN (2007) The biological importance of the Eastern Arc Mountains of Tanzania and Kenya. Biological Conservation 134(2): 209–231. https://doi.org/10.1016/j.biocon.2006.08.015
- Burju T, Hundera K, Kelbessa E (2013) Floristic composition and structural analysis of Jibat humid Afromontane Forest, West Shewa Zone, Oromia National Regional State, Ethiopia. Ethiopian Journal of Education and Science 8(2): 11–32. https://doi.org/10.4314/star. v2i2.98887
- Bytebier B (2001) Taita Hills Biodiversity Project Report. National Museums of Kenya, Nairobi, 1–121.
- Carrasco J, Price V, Tulloch V, Mills M (2020) Selecting priority areas for the conservation of endemic trees species and their ecosystems in Madagascar considering both conservation

- value and vulnerability to human pressure. Biodiversity and Conservation 29(6): 1841–1854. https://doi.org/10.1007/s10531-020-01947-1
- CEPF (2005) Stakeholders workshop on the conservation and management of the Taita Hills forests. Taita Hills Safari Lodge, Wundanyi, 1–42.
- CEPF (2021) Biodiversity hotspots defined: Who lives in the biodiversity hotspots? https://www.cepf.net/our-work/biodiversity-hotspots/hotspots-defined [accessed 28.06.2021]
- Chase MW, Christenhusz M, Fay M, Byng J, Judd WS, Soltis D, Soltis PS, Stevens PF (2016) An update of the Angiosperm Phylogeny Group classification for the orders and families of flowering plants: APG IV. Botanical Journal of the Linnean Society 181(1): 1–20. https://doi.org/10.1111/boj.12385
- Chege J, Bytebier B (2005) Vegetation structure of four small forest fragments in Taita Hills, Kenya. Journal of East African Natural History 94(1): 231–234. https://doi.org/10.2982/0012-8317(2005)94[231:VSOFSF]2.0.CO;2
- Christenhusz MJ, Reveal JL, Farjon A, Gardner MF, Mill RR, Chase MW (2011) A new classification and linear sequence of extant gymnosperms. Phytotaxa 19(1): 55–70. https://doi.org/10.11646/phytotaxa.19.1.3
- Cincotta RP, Wisnewski J, Engelman R (2000) Human population in the biodiversity hotspots. Nature 404(6781): 990–992. https://doi.org/10.1038/35010105
- Conservation International (2021) Biodiversity Hotspots: Targeted investments in nature's most important places. https://www.conservation.org/priorities/biodiversity-hotspots [accessed 28.06.2021]
- Conte CA (2010) Forest history in East Africa's Eastern Arc Mountains: Biological science and the uses of history. Bioscience 60(4): 309–313. https://doi.org/10.1525/bio.2010.60.4.9
- Cordeiro NJ, Howe HF (2001) Low recruitment of trees dispersed by animals in African forest fragments. Conservation Biology 15(6): 1733–1741. https://doi.org/10.1046/j.1523-1739.2001.99579.x
- Cunningham C, Beazley KF (2018) Changes in human population density and protected areas in terrestrial global biodiversity hotspots, 1995–2015. Land (Basel) 7(4): e136. https://doi.org/10.3390/land7040136
- Darbyshire I, Timberlake J, Osborne J, Rokni S, Matimele H, Langa C, Datizua C, de Sousa C, Alves T, Massingue A, Hadj-Hammou J, Dhanda S, Shah T, Wurtsen B (2019) The endemic plants of Mozambique: Diversity and conservation status. PhytoKeys 136: 45–96. https://doi.org/10.3897/phytokeys.136.39020
- Enroth J, Nyqvist P, Malombe I, Pellikka P, Rikkinen J (2013) Additions to the moss flora of the Taita Hills and Mount Kasigau, Kenya. Polish Botanical Journal 58(2): 495–510. https://doi.org/10.2478/pbj-2013-0062
- Enroth J, Pócs T, He X, Nyqvist P, Stam ÅCS, Malombe I, Rikkinen JK (2019) An annotated checklist of the bryophytes of Taita Hills region, Kenya. Acta Musei Silesiae. Scientiae Naturales 68(1–2): 53–66. https://doi.org/10.2478/cszma-2019-0007
- Fischer E, Rembold K, Althof A, Obholzer J, Malombe I, Mwachala G, Onynago J, Dumbo B, Theisen I (2010) Annotated checklist of the vascular plants of Kakamega Forest, Western Province, Kenya. Journal of East African Natural History 99(2): 129–227. https://doi.org/10.2982/028.099.0205
- FTEA [Eds] (1952–2012) Flora of Tropical East Africa, Royal Botanic Gardens, Kew.

- GBIF (2021) GBIF Home Page. Available from: https://www.gbif.org [accessed 28 June 2021] Gereau RE, Taylori CM, Luke WRQ (2005) Endemic plant species of the Eastern Arc Mountains of Kenya and Tanzania: Analysis and refinement of distribution patterns. In: Ghazanfar SA, Beentje HJ (Eds) African plants: Biodiversity, taxonomy and uses. Royal Botanical Gardens, Kew, 1–11.
- Girma A, Fischer E, Dumbo B (2015) Vascular Plant Diversity and Community Structure of Nandi Forests, Western Kenya. Journal of East African Natural History 103(2): 125–152. https://doi.org/10.2982/028.103.0202
- Habel JC, Teucher M, Mulwa RK, Haber W, Eggermont H, Lens L (2016) Nature conservation at the edge. Biodiversity and Conservation 25(4): 791–799. https://doi.org/10.1007/s10531-016-1073-2
- Hamilton LS, Juvik JO, Scatena FN (1995) The Puerto Rico tropical cloud forest symposium: Introduction and workshop synthesis. In: Hamilton LS, Juvik JO, Scatena FN (Eds) Tropical montane cloud forests. Springer-Verlag, New York, 1–23. https://doi.org/10.1007/978-1-4612-2500-3\_1
- Himberg N (2004) Community-based ecotourism as a sustainable development option in Taita Taveta, Kenya. In: Pellikka P, Ylhäisi J, Clark B (Eds) Taita Hills and Kenya, 2004 seminar, reports and journal of a field excursion to Kenya. Expedition reports of the Department of Geography, University of Helsinki, Helsinki, 40:87–95.
- Himberg N, Omoro L, Pellikka PKE, Luukkanen O (2009) The benefits and constraints of participation in forest management. The case of Taita Hills, Kenya. Fennia International. The Journal of Geography 187(1): 61–76.
- Hrdina A, Romportl D (2017) Evaluating global biodiversity hotspots Very rich and even more endangered. Journal of Landscape Ecology 10(1): 108–115. https://doi.org/10.1515/jlecol-2017-0013
- iDigbio (2021) iDigbio Home page. https://www.iDigbio.org [accessed 28 June 2021]
- Isango JA (2007) A partially annotated bibliography of biodiversity studies in the Eastern Arc Mountains. Tanzania Forestry Research Institute, 1–320.
- IUCN (2021) The IUCN Red List of Threatened Species. Version 2021-1. http://www.iucn-redlist.org. [Downloaded on 21 June 2021]
- Jaetzold D, Schmidt H, Hornetz B, Shisanya C (2010) Farm management handbook of Kenya: Volume II: Natural Conditions and Farm Management Information; Annex: Atlas of Agro-Ecological Zones, Soils and Fertilizing by Group of Districts; Subpart C2: Taita Taveta County. Ministry of Agriculture, Kenya and German Agency for International Cooperation (GIZ), Nairobi.
- Kipkoech S, Melly DK, Muema BW, Wei N, Kamau P, Kirika PM, Wang QF, Hu GW (2020) An annotated checklist of the vascular plants of Aberdare Ranges Forest, a part of Eastern Afromontane Biodiversity Hotspot. PhytoKeys 149: 1–88. https://doi.org/10.3897/phytokeys.149.48042
- Krupnick GA (2013) Conservation of tropical plant biodiversity: What have we done, where are we going? Biotropica 45(6): 693–708. https://doi.org/10.1111/btp.12064
- Linder PH (2014) The evolution of African plant diversity. Frontiers in Ecology and Evolution 2(38): 1–14. https://doi.org/10.3389/fevo.2014.00038

- Lovett JC (1998a) Importance of the Eastern Arc Mountains for vascular plants. Journal of East African Natural History 87(1&2): 59–74. https://doi.org/10.2982/0012-8317(1998)87[59:IOTEAM]2.0.CO;2
- Lovett JC (1998b) Eastern tropical African center of endemism: A candidate for the world's heritage status? Journal of East African Natural History 87(1&2): 359–366. https://doi.org/10.2982/0012-8317(1998)87[359:ETACOE]2.0.CO;2
- Luke Q (2005) Annotated checklist of the plants of the Shimba Hills, Kwale District, Kenya. Journal of East African Natural History 94(1): 5–121. https://doi.org/10.2982/0012-8317(2005)94[5:ACOTPO]2.0.CO;2
- Madoffe S, Mwang'ombe J, O'Connell B, Rogers P, Hertel G, Mwangi J (2005) Forest health monitoring in the Eastern Arc Mountains of Kenya and Tanzania: A baseline report on selected forest reserves. US Agency for International Development and USDA Forest Service, Washington, DC.
- Maria LM (2007) Monitoring indigenous tropical montane forests in the Taita Hills using airborne digital camera imagery. Msc Thesis, University of Helsinki, Helsinki.
- Mbuni YM, Zhou Y, Wang S, Ngumbau VM, Musili PM, Mutie FM, Njoroge B, Kirika PM, Mwachala G, Kathambi V, Rono PC, Hu GW, Wang QF (2019) An annotated checklist of vascular plants of Cherangani hills, Western Kenya. PhytoKeys 120: 1–90. https://doi.org/10.3897/phytokeys.120.30274
- Medley KE, Kalibo HW (2005) An ecological framework for participatory ethnobotanical research at Mt. Kasigau, Kenya. Field Methods 17(3): 302–314. https://doi.org/10.1177/1525822X05277462
- Medley KE, Kalibo HW (2007) Ethnobotanical survey of 'wild' woody plant resources at Mt. Kasigau, Kenya. Journal of East African Natural History 96(2): 149–186. https://doi.org/10.2982/0012-8317(2007)96[149:ESOWWP]2.0.CO;2
- Medley KE, Maingi JK (2014) Biogeographic patterns of forest diversity at Mount Kasigau, Kenya. Journal of East African Natural History 103(1): 1–24. https://doi.org/10.2982/028.103.0104
- Medley KE, Mwandoe Z, Mwamodo M, Zungi J, Mwatate D, Njege N (2010) Interpreting resource gradients and patches for the conservation of woody plant diversity at Mt. Kasigau, Kenya. Ethnobotany Research and Applications 8: 49–60. https://doi.org/10.17348/era.8.0.49-60
- Medley KE, Maingi JK, Mutiti CM (2017) Conservation of woody plant diversity in Kenya. In: Ahuja MR, Jain SM (Eds) Biodiversity and Conservation of Woody Plants, Sustainable Development and Biodiversity 17. Springer International Publishing, Switzerland, 273–290. https://doi.org/10.1007/978-3-319-66426-2\_10
- Melly DK, Kipkoech S, Muema BW, Kamau P, Malombe I, Hu GW, Wang QF (2020) An annotated checklist of the vascular flora of South and North Nandi Forests, Kenya. PhytoKeys 155: 87–139. https://doi.org/10.3897/phytokeys.155.51966
- Mittermeier RA, Myers N, Thomsen JB, da Fonseca GAB, Olivieri S (1998) Biodiversity hotspots and major wilderness areas: Approaches to setting conservation priorities. Conservation Biology 12(3): 516–520. https://doi.org/10.1046/j.1523-1739.1998.012003516.x
- Mittermeier RA, Gil PR, Hoffmann M, Pilgrim J, Brooks T, Mittermeier CG, Lamoreux J, da Fonseca GAB (2004) Hotspots revisited: Earth's biologically richest and most endangered terrestrial ecoregions. Cemex, 1–390.

- Mwamidi DM, Mwasi SM, Nunow AA (2012) Indigenous knowledge of Taita community in the use and conservation of medicinal plants: The case of Taita Hills, Kenya. Journal of Bio Innovations 1(4): 77–86.
- Mwang'ombe J (2005) Restoration and increase of forest connectivity in Taita Hills: Survey and suitability assessment of exotic plantations for restoration. East African Wildlife Society and Critical Ecosystem Partnership Fund, Nairobi.
- Myers N (1988) Threatened biotas: "Hot spots" in tropical forests. The Environmentalist 8(3): 187–208. https://doi.org/10.1007/BF02240252
- Myers N (1993) Tropical forests: The main deforestation fronts\*. Environmental Conservation 20(1): 9–16. https://doi.org/10.1017/S0376892900037176
- Myers N, Mittermeir RA, Mittermeir CG, da Fonseca GAB, Kent J (2000) Biodiversity hotspots for conservation priorities. Nature 403(6772): 853–858. https://doi.org/10.1038/35002501
- Ndang'ang'a PK, Barasa FM, Kariuki MN, Muoria P (2016) Trends in forest condition, threats and conservation action as derived from participatory monitoring in coastal Kenya. African Journal of Ecology 84(1): 76–86. https://doi.org/10.1111/aje.12272
- Newmark WD (1998) Forest area, fragmentation, and loss in the Eastern Arc Mountains: Implications for the conservation of biological diversity. Journal of East African Natural History 87(1): 29–36. https://doi.org/10.2982/0012-8317(1998)87[29:FAFALI]2.0.CO;2
- Ngumbau VM, Luke WRQ, Nyange M, Wanga VO, Muema BW, Mbuni YM, Munyao JN, Oulo MA, Mkala EM, Kipkoech S, Malombe I, Hu GW, Wang QF (2020) An annotated checklist of the coastal forests of Kenya, East Africa. PhytoKeys 147: 1–191. https://doi.org/10.3897/phytokeys.147.49602
- Nyange M, Ngumbau VM, Luke WRQ (2020) *Acridocarpus taitensis* (Malpighiaceae), a new species from Taita Hills in Kenya, Eastern Arc Mountains. PhytoKeys 435(1): 81–84. htt-ps://doi.org/10.11646/phytotaxa.435.1.11
- Omoro LMA, Luukkanen O (2011) Native tree species regeneration and diversity in the mountain cloud forests of East Africa. In: Grillo O (Ed.) Biodiversity loss in a changing planet. IntechOpen, 241–256. http://www.intechopen.com/books/biodiversity-loss-in-a-changingplanet/native-tree-species-regeneration-and-diversity-in-the-mountain-cloud-forests-of-east-africa
- Omoro LMA, Pellikka PKE, Rogers PC (2010) Tree species diversity, richness, and similarity between exotic and indigenous forests in the cloud forests of Eastern Arc Mountains, Taita Hills, Kenya. Journal of Forestry Research 21(3): 255–264. https://doi.org/10.1007/s11676-010-0069-0
- Omoro LMA, Starr M, Pellikka PKE (2013) Tree biomass and soil carbon stocks in indigenous forests in comparison to plantations of exotic species in the Taita Hills of Kenya. Silva Fennica 47(2): 1–18. https://doi.org/10.14214/sf.935
- Palmer MW, Wade GL, Neal P (1995) Standards for the writing of floras. Bioscience 45(5): 339–345. https://doi.org/10.2307/1312495
- Pellikka PKE, Lötjönen M, Siljandera M, Lens L (2009) Airborne remote sensing of spatiotemporal change (1955–2004) in indigenous and exotic forest cover in the Taita Hills, Kenya.

- International Journal of Applied Earth Observation and Geoinformation 11(4): 221–232. https://doi.org/10.1016/j.jag.2009.02.002
- Pellikka PKE, Clark BJF, Gosa GA, Himberg N, Hurskainen P, Maeda E, Mwang'ombe J, Omoro LMA, Siljander M (2013) Agricultural expansion and its consequences in the Taita Hills, Kenya. In: Paron P, Olago D, Omuto CT (Eds) Developments in Earth Surface Processes, North-Holland Pub. Co., Amsterdam, 165–179. https://doi.org/10.1016/B978-0-444-59559-1.00013-X
- POWO (2019) Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Published on the Internet; http://www.plantsoftheworldonline.org/ [Retrieved on 12<sup>th</sup> November 2021]
- PPG 1 (2016) A community-based classification for extant ferns and lycophytes. Journal of Systematics and Evolution 54(6): 563–603. https://doi.org/10.1111/jse.12229
- Rodgers PC, O'Connell B, Mwang'ombe J, Madoffe S, Hertel G (2008) Forest health monitoring in the Ngangao forest, Taita Hills, Kenya: A five-year assessment of change. Journal of East African Natural History 97(1): 3–17. https://doi.org/10.2982/0012-8317(2008)97[3:FHMITN]2.0.CO;2
- Rogo L, Oguge N (2000) The Taita Hills forest remnants: A disappearing world heritage. Ambio 29(8): 522–523. https://doi.org/10.1579/0044-7447-29.8.522
- Roskov Y, Ower G, Orrell T, Nicolson D, Bailly N, Kirk PM, Bourgoin T, DeWalt RE, Decock W, van Nieukerken E, Zarucchi J, Penev L [Eds] (2021) Species 2000 & ITIS Catalogue of Life, 2021 Annual Checklist. Species 2000, Naturalis, Leiden. https://www.catalogueoflife.org
- Salminen H (2004) A geographic overview of Taita Hills, Kenya. Department of Geography, University of Helsinki, Helsinki.
- Senbeta F, Schmitt C, Woldemariam T, Boehmer HJ, Denich M (2014) Plant diversity, vegetation structure and relationship between plant communities and environmental variables in the Afromontane forests of Ethiopia. Ethiopian Journal of Science 37(2): 113–130. https://doi.org/10.4314/SINET.V37I2
- Spanhove T, Lehouck V (2008) Don't miss the invasions! A note on forest health monitoring in the Taita Hills, Kenya. Journal of East African Natural History 97(2): 255–256. https://doi.org/10.2982/0012-8317-97.2.255
- Stewart J, Campbell B (1996) Orchids of Kenya. Timber Press, Inc., 1–176.
- Teucher M, Schmitt CB, Wiese A, Apfelbeck B, Maghenda M, Pellikka P, Lens L, Habel JC (2020) Behind the fog: Forest degradation despite logging bans in an East African cloud forest. Global Ecology and Conservation 22: 1–13. https://doi.org/10.1016/j.gecco.2020.e01024
- Thijis KW, Roelen I, Musila WN (2013) Field guide to the woody plants of Taita Hills, Kenya. Journal of East African Natural History 102(1&2): 1–272. https://doi.org/10.2982/028.102.0101
- Tropicos (2021) Missouri Botanical Garden. https://www.tropicos.org [accessed 02 Jul 2021]
- Turner WR, Brandon K, Brooks TM, Costanza R, Da Fonseca GAB, Portela R (2007) Global conservation of biodiversity and ecosystem services. Bioscience 57(10): 868–873. https://doi.org/10.1641/B571009

- Tweedie ME (1976) Habitats and check-list of plants on the Kenya side of Mount Elgon. Kew Bulletin: 227–257. https://doi.org/10.2307/4109170
- Watuma BM, Wei N, Melly DK, Kipkoech S, Kirika PM, Hu GW, Wang QF (2019) Zehneria tuberifera (Cucurbitaceae), a new species from Taita Hills, Kenya. Phytotaxa 411(3): 215–222. https://doi.org/10.11646/phytotaxa.411.3.5
- Watuma BM (2021) Flora and diversity of vascular plants in Taita Hills, Kenya. PhD Thesis, Wuhan Botanical Garden, Wuhan.
- Wheeler QD, Knapp S, Stevenson DW, Stevenson J, Blum SD, Boom BM, Borisy GG, Buizer JL, De Carvalho MR, Cibrian A, Donoghue MJ, Doyle V, Gerson EM, Graham CH, Graves P, Graves SJ, Guralnick RP, Hamilton AL, Hanken J, Law W, Lipscomb DL, Lovejoy TE, Miller H, Miller JS, Naeem S, Novacek MJ, Page LM, Platnick NI, Porter-Morgan H, Raven PH, Solis MA, Valdecasas AG, Van Der Leeuw S, Vasco A, Vermeulen N, Vogel J, Walls RL, Wilson EO, Woolley JB (2012) Mapping the biosphere: Exploring species to understand the origin, organization and sustainability of biodiversity. Systematics and Biodiversity 10(1): 1–20. https://doi.org/10.1080/14772000.2012.665095
- Wilder C, Brooks T, Lens L (1998) Vegetation structure and composition of the Taita Hills forests. Journal of East African Natural History 87(1): 181–187. https://doi.org/10.2982/0012-8317(1998)87[181:VSACOT]2.0.CO;2
- Zhou Y (2017) Inventory and diversity of vascular plants in Mt. Kenya, East Africa. PhD Thesis, Wuhan Botanical Garden, Wuhan.
- Zhou Y, Liu B, Mbuni Y, Yan X, Mwachala G, Hu G, Wang Q (2017) Vascular flora of Kenya, based on the flora of tropical East Africa. PhytoKeys 90: 113–126. https://doi.org/10.3897/phytokeys.90.20531